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ABSTRACT

To test the effects of black English on school performance, second graders in a Harlem school were interviewed and tested for competence in spontaneous speech, comprehension of oral and written materials, and oral reading, as well as for explicit grammatical knowledge of standard English morphemes often missing in black English. The data show large individual differences in ability to use standard forms and low but significant correlations between speech and reading performance. Instruction in use of standard forms significantly influenced several performances. The speech patterns and grammatical knowledge of the Harlem children were compared with those of second graders in a predominantly white middle-class school in Connecticut. High school students in Connecticut were also tested for their use and comprehension of standard verb inflections and negatives. Data from developmental English classes showed white students better able than blacks to do grammatical exercises involving standard English. An attempt to improve use of standard verb inflections and negatives through systematic instruction proved unsuccessful with the high school students. It is concluded on the basis of this study that command of standard English is related to school performance. (Author/GW)

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BLACK ENGLISH GOES TO SCHOOL

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I. INTRODUCTION

The relatively low educational achievement of children in urban slums has been ascribed to their poor command of language (e.g., Deutsch, 1963). When standard tests of language development showed lower scores for poor children than for the middle class, psychologists and educators regarded this as evidence of a deficiency and sought an explanation for it either in hereditary racial differences or, more often, in some kind of "cultural deprivation" resulting from the life style of poverty. Early childhood education programs for the poor emphasized language training in order to overcome the supposed deficit and prepare the children to make better use of the opportunity for education provided by the schools.

On the other hand Labov's (1972b) linguistic studies of Black youth who were poor showed a wealth of linguistic skill in boys who were failing in school, but the skill was expressed in a dialect systematically different from the Standard English of the white middle class community. His description of this dialect showed that it has phonological and grammatical characteristics likely to be interpreted as errors or as evidence of retarded development by speakers of Standard English who are unaware of dialect differences. Such linguistic findings have led some to argue that the educational difficulties of Black children are not due to any deficiencies, but primarily to dialect differences (e.g., Baratz, 1970). She points out that these linguistic differences tend to be socially stigmatized, so that teachers may treat the Black children's dialect as bad or

inferior, and the difference may also create problems for the child in understanding the teacher and the educational materials. Those Black children whose dialect is likely to be most different from standard are the very poor or newly migrated from the country. These are also the most likely to feel alien from the school and have trouble understanding the content of the lessons.

The purpose of the present study was to show the very specific effects of nonstandard dialect upon various linguistic performances likely to affect educational achievement, particularly upon understanding and ability to use standard grammatical forms that differ from those most often used by the child.

Nonstandard Black English has been described by several linguists, including Labov, Cohen, Robins, and Lewis (1968). It differs from Standard English in a number of systematic ways of which we selected three for special study because they allowed for control over phonological variables. All involve the required addition of a final sibilant to nouns, pronouns, or verbs in Standard English. In Black English these endings are all used inconsistently and by some speakers only rarely, so that Labov attributes various linguistic statuses to these morphemes. The third person singular of present tense verbs requires a sibilant ending in Standard English. Speakers of Black English use this ending relatively seldom, for example,

Here come the judge.

Labov has concluded that there is no third singular Z in the underlying structure of their dialect. The possessive inflection

is also frequently omitted by speakers of Black English in the attributive position, that is, when the noun representing the possessor precedes the noun representing the thing possessed. However, in the absolute position, with the possessor coming at the end of the phrase, the possessive inflection is commonly used by nonstandard speakers. Thus,

My grandmother house....

but That house is my grandmother's.

Labov concludes that a possessive Z does occur in Black English even though its distribution is different from standard. The third sibilant morpheme that distinguishes Standard English from Black nonstandard is the contraction of the copula "is." (Although the contraction is not technically an inflection, it behaves phonologically like the Z inflections at the end of the preceding subject noun or pronoun.) In Black nonstandard the copula is often completely deleted in those positions where Standard English allows for contraction.

She wild.

Dat not no man.

That the copula exists in the underlying structure of the dialect is shown by the fact that the full form <u>is</u> occurs invariably in those positions where contraction is not permitted in Standard English, e.g., "Tell it like it is." Thus Labov considers the omission of the copula to be an extension of the contraction rule of Standard English. A fourth sibilant morpheme, the plural inflection of nouns, is shared by Standard and Black English.

Although both allow for its omission in certain specific contexts, Labov found that plural endings are rarely omitted by Blacks, and he attributed to them a grammatical status similar to that in Standard English.

The accidental fact that these four grammatical morphemes take the same phonlogical form while differing greatly in their relative grammatical status in the two dialects gives the opportunity to study grammatical implications of dialect differences independently of phonological considerations. This control is important since the reduction or omission of final consonants is one of the phonological characteristics of Black English and the occasional omission of Z endings might be attributed to this rather than to grammatical status if it were not found that the pattern of omission of Z endings were clearly related to grammatical status.

The implications of nonstandard dialect for education should be explored carefully before any conclusion is reached about the importance of using Standard English exclusively in school. Baratz' (1970) belief that speakers of nonstandard dialects may have more difficulty than standard speakers in learning to read because written material conforms more closely to standard spoken English is plausible for several reasons. Dialect differences might inhibit learning of the sound-symbol system and might also lead to misinterpretation of the meaning of written material. In addition, children might have some trouble understanding or being understood by a teacher who spoke only Standard English. In later years, their written work

might also appear deficient in terms of standard grammar. However, it remains to be shown that any of these consequences in fact do occur in speakers of nonstandard English. The present studies explore several of these possibilities.

II. THE LANGUAGE OF BLACK CHILDREN IN THE EARLY GRADES

The subjects of this first study were 27 members of a second grade class in a school in mid-Manhattan attended by children from some very poor neighborhoods and low-income housing projects. All were Black English-speaking children of U.S. origin. The children were not a random sample since this group was one of the more advanced second grades in the school. Their language varied from almost standard for some children to quite nonstandard, and it is this variation which gives us the opportunity to study the effects of differences in dialect upon various performances.

DESCRIPTION OF TESTS AND RESULTS

Several different linguistic performances were measured to determine the ways in which dialect influences them. The basic measure was the frequency of use of the four sibilant morphemes in the spontaneous speech of the children. Another kind of speech measure was a "context-cue" test consisting of responses to specific questions designed by the experimenter to elicit the usages in question. The child's ability to imitate the experimenter's model utterance is still another kind of performance. Understanding was measured by a modification of Fraser, Bellugi, and Brown's test of comprehension and production of grammatical forms in reference to pictures representing their meaning (1963).

A similar test using printed phrases tested reading comprehension while oral reading showed the ability to articulate forms represented in print. Finally, the child was asked directly to tell the meaning of the four morphemes to test his explicit grammatical knowledge. We will first describe these tests in some detail and then report upon the way the children performed on each.

Spontaneous speech.-- As a basic measure of linguistic competence, the spontaneous speech of the children was recorded during an interview in which two children met for the first time with the experimenter. The experimenter asked questions about their school, play, and television, let them listen to the tape recorder on request, and introduced toys and games designed to stimulate speech and reading. The interview was conducted with two children at a time in order to avoid the linguistically inhibiting conditions that are so common when a strange, especially a white adult tries to talk to a Black child in a school setting where most teachers are white (Labov, 1970). The interview was successful in eliciting apparently relaxed spontaneous informal chatter from some children. Others remained fairly formal, although all said enough to allow for most of the measurements of the four morphemes. All the results should be interpreted in light of the probability that many of the children would speak differently in another social context. The taped conversation of this interview, together with spontaneous speech recorded throughout the series of five experimental sessions with each child, was searched for all occasions where each of

the four sibilant morphemes would be appropriate, and the score was the percentage of appropriate occasions in which the standard morpheme was used. Only clear instances of presence or absence of the sibilant were scored, excluding uncertain instances such as where the sound recording was unclear or where the following word began with a sibilant. In addition, copula contractions with it, that and what were excluded because their form is invariant--the /t/ being assimilated with the copula contraction to produce iss, thass and whuss. Table 1 shows

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Insert Table 1 about here.

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the mean percentage of use of each of the four standard morphemes. (In this and other tables results are reported in percentages to facilitate comparison even though the base for each individual is sometimes very small.) The last column of the table shows a total score representing the percentage of appropriate occasions where any of the three dialect-related morphemes was used. There is a wide range of dialect use in this single class of 27 children. Whereas the noun plural inflection is used on almost all occasions by all the children, some almost never use the other morphemes and others use all of them quite consistently. Some children use one or more consistently but not others. The intercorrelations between spontaneous use of the three different morphemes range from .41 to .61, statistically significant but still far from perfect. It is clear that there is considerable variation both in the amount of use

of nonstandard forms and in the selection of particular forms by an individual. Although all these children are exposed to both standard and nonstandard dialects in different aspects of their lives, their own spontaneous speech shows a wide range of differences in the dialect used in this particular interview situation.

Context-cue test.-- In order to test children's use of the sibilant morphemes in controlled grammatical contexts and to increase frequencies of use for assessment purposes, several devices were employed to induce the child to use the appropriate constructions. For the plural, the experimenter showed a picture of several cats (or other things) and asked, "What are these?" To elicit a verb, the experimenter started by saying "A flying nun is a nun that...." pausing with voice raised to allow the child to fill in "...flies" or "...fly." To elicit possessive the experimenter showed pictures again, this time of a person or animal with something it possessed. The experimenter presented the picture and said, "If the girl has an elephant, we say it's the...." If the child did not respond "...girl's elephant" or "...girl elephant," the experimenter added, "...we say it's whose elephant?" To induce a copula the experimenter said, "I'm going to ask a question, and I want you to give me a certain kind of answer. If I ask, 'Is the boy eight?', you say, 'Yes, the boy's eight.'" After the child learned to give the appropriate kind of response beginning with "Yes....," his responses to different questions showed how often he included the contracted or full copula.

Context-cue items for each morpheme were administered at the beginning and at the end of the experimental series using different words before and after but the same total set of words for all subjects. The test items for the context-cue test of the Z morphemes were matched so that the morphemes occurred in similar phonological contexts to control for any variations in use of the different allomorphs conditioned by features of the preceding phoneme. Table 1 shows that the pattern is similar

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Insert Table 1 about here.

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to but not exactly like that of spontaneous speech. None of the differences between spontaneous and context-induced usages was significant for any individual morpheme nor for the score combining dialect-related morphemes, though all of them show somewhat higher scores for the context-cue test than for spontaneous speech. However, an analysis of variance of dialect-related scores based upon those 21 subjects for whom data were complete showed a significant difference between context-cued and spontaneous speech ($F(1,2) = 8.95$; $p<.01$) across the three morphemes as well as a significant effect of morpheme ($F(1,2) = 22.54$; $p<.001$) and an interaction between the two variables ($F(1,2) = 21.24$; $p<.001$) reflecting the much larger difference between context-cued and spontaneous speech for the possessive than for the cupola.

Oral reading.-- The question whether speaking one dialect makes it harder to learn to read a different one is an obvious

and important one. One way to assess the possible effects of speaking Black English in learning to read Standard English is to count how often the child pronounces inflections which are shown in print, but which are not necessary in his own linguistic system. Table 1 shows the percentage of times each morpheme was pronounced audibly out of the total number of times the child encountered it in all the oral reading connected with the experiment. Although the plural morpheme was most often read, just as it was most often used in spontaneous speech, the morphemes commonly omitted in spontaneous speech were all more likely than not to be pronounced in oral reading, perhaps because the visual stimulus prompted it.

Since a child in school may have often been corrected when he failed to articulate a final sibilant, it seemed possible that the more frequent use of these sibilants in oral reading might be due, not to recognition of their grammatical appropriateness, but simply to a tendency to overcorrect, as though the child threw in terminal sibilants at random after being frequently criticized for leaving them out. Their use in inappropriate places in spontaneous speech is fairly common in speakers of Black English (Labov, et al., 1968), possibly because of such overcorrection. To check whether the greater frequency of articulation in reading than in speaking was due simply to a tendency to throw in final sibilants everywhere, we typed sentences containing equal numbers of words with and without s endings and compared the number of times a word with no ending (Ø) was read as though it ended

in s with the number of times a word ending in s was read with Ø. Instances where Ø might be mistakenly read as s are easy enough to devise for singular and plural nouns and verbs simply by including singular nouns or verbs with plural subjects. For negative instances that could be taken for possessives we used simply noun-noun sequences, e.g., river water, and for negative instances of copula, pronouns followed by verbs, e.g., he couldn't. Our subjects almost never read s where it was inappropriate. Overcorrection, then, is not a serious problem. It should be noted that the oral reading performance of the children in this class is generally good. In addition, their average score on the Metropolitan Achievement Test of reading was about at their grade level.

Picture-meaning test.-- The proportion of standard forms used by a child in our interviews does not necessarily tell us how well he understands Standard English. Not only are children able to use more standard forms than they actually do use in informal situations, but they also have a passive comprehension of many forms they cannot use at all themselves (Labov, 1970). Since understanding is as important for educational purposes as spontaneous production, we have devised a separate test to measure it. We adapted the technique first used by Fraser, Bellugi, and Brown (1963) in which children were shown pictures illustrating the meanings of grammatical features and asked to respond in terms of those meanings. Two grammatical phrases differing only in the presence or absence of a given morpheme were chosen so that their contrasting meanings could be clearly illustrated

in a pair of pictures. Table 2 shows the phrases used on the tests. For the plural and singular meanings of nouns and verbs,

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Insert Table 2 about here.

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the two pictures for each pair differed simply in the number of dogs shown eating or sheep pushing. Since the verb inflection also represents present tense, some pairs of pictures differed in that one showed the act still being done and the other showed it completed. For the possessive (Figure 1) one picture represented the duck as a nurse and the other showed a duck being

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Insert Figure 1 about here.

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tended by a normal looking nurse, illustrating the difference between The duck nurse and The duck's nurse. The copula questions depended either upon homonym pairs or upon verbs whose past tense forms were the same as the participles used in passives. The natural redundancy of language makes such minimal pairs hard to devise but not impossible.

To test a child's understanding of an inflection, the experimenter began by making sure the child noticed the important difference between the two pictures and then asked him to imitate the two phrases without indicating which phrase went to which picture. Many children spontaneously pointed to or looked at the appropriate picture during this phase. Imitation served to give the child practice with the particular titles he would be asked to use and also to confirm his ability to hear and

enunciate the crucial sounds. Next the child was asked to point to the picture called The duck's nurse. In the "comprehension" question the title with the sibilant morpheme was always asked for. After the child pointed to his chosen picture, the experimenter asked, "Now what did we call the other picture?" This required the child to produce the correct name of the picture pointed to by the experimenter. Then the experimenter pointed to the picture chosen by the child and asked him to name that, too. For most of our analyses the child was credited with showing full understanding of the crucial form only if he answered the comprehension question and both production questions correctly, using the inflection or omitting it appropriately for each picture.

Each subject responded to two pairs of pictures for each morpheme in the pretest phase, up to two during training and two more in the posttest. For purposes of comparing individual differences, all test items were counted for each individual. Table 1 shows the mean percentage of items completely correct for each morpheme, that is, correct selection and correct production of both phrases for appropriate pictures. The relative status of the copula and possessive in spontaneous speech is not the same as their relative status in our comprehension tests. The copula is significantly less well understood than the possessive in this test ($t(26) = 10.00$; $p<.001$) whereas it occurs significantly more often in appropriate contexts in spontaneous speech ($t(20) = 6.31$; $p<.001$).

Reading comprehension.-- Articulation of a morpheme in speech or oral reading does not necessarily imply that the meaning of it is understood by the speaker. To find out whether our subjects could grasp grammatical meanings from the printed word, we modified the technique used for oral comprehension by printing the phrases on separate cards and asking the child to match the two cards with the correct pictures.

The test was done only once, at the end of the experimental series, and the pictures used were the same ones the child had seen five or six weeks earlier on the oral test, so that the children were already familiar with the pictures. The experimenter said, "Remember the duck and the nurse? Here are the names of the two pictures. Read them carefully, look at the pictures and put each name under the picture it goes to." After placing the cards, the child was asked to read them aloud. This oral reading appeared not to be an equivalent of the oral production test, since the children fixed their attention solely on the printed words and ignored the pictures. Thus the response could not be interpreted as "reading aloud with understanding," and only the placement of the printed cards was scored as comprehension. Table 1 shows the mean percentage of correct matches with the printed cards. All the reading comprehension scores are significantly different from the 50% chance level. However, the singular meaning of the verb is significantly worse than chance, as though the s ending on the verb were treated as meaning plural rather than singular.

Grammatical knowledge.-- It is obvious that children use grammatical forms they cannot name or interpret in terms of explicit rules. However, since grammatical statements may be useful in developing or modifying language skills, it is worthwhile to know how well children at a given age can describe the grammar of Standard English. In this study, the children in the second grade were asked to explain the meaning of s endings in two simple sentences which were presented in typewritten form under a picture illustrating what they said. The sentences were as follows:

The dogs eat the cat's food. The cat says it's hers. After the child read the sentences aloud, the experimenter asked in turn about each s morpheme what it meant in the context. Table 1 shows that most children were able to state clearly the meaning of the plural. It seems intuitively much harder to answer the questions as to what the verb and possessive inflection mean and few acceptable answers were made. Surprisingly few could say that 's in it's meant is although intuition suggests that it would be a fairly obvious answer. The difficulty may be due to the fact that they normally assimilate the /ts/ into simply /s/ in that word. Segmentation of this unit into two morphemes may be difficult, especially when the copula is deletable. A number of answers consisted of repeating the morpheme itself (repetition) or simply stating that the s was there (description). These are here counted as incorrect along with those that consisted of interpreting other morphemes

as plural. Chapter III reports a further investigation of explicit grammatical knowldege.

INTERCORRELATIONS BETWEEN DIALECT USE AND EDUCATIONAL ACHIEVEMENT

One way to answer the question of what implications nonstandard English has for education is to examine the correlations between various dialect measures and standardized achievement tests. Twenty-three of our subjects had taken the Metropolitan Achievement Test for word knowledge and reading about a month before the experiment began. The bottom rows of Table 3 show the average scores and ranges. Since the class was at this point just a little more than halfway through the second grade, their scores are near grade level.

Table 3 also shows the significant correlations between

Insert Table 3 about here.

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the Metropolitan subtests and several of our dialect measures. Our scores are for all dialect-related morphemes together, that is, the combined scores for the verb and possessive inflections and for the full or contracted copula _is_, indicating how frequently they were used in speech and oral reading and how well understood. If the absence of these grammatical morphemes in Black English is a serious problem in education, we would expect some correlation between use of nonstandard dialect and the achievement tests. The word knowledge subtests on the Metropolitan require the child to select one of a set of four printed words to match either a picture or a printed word synonym. No

sentences are involved and therefore no grammatical morphemes. Word knowledge was not signficantly correlated with either spontaneous use of grammatical morphemes or any comprehension measure. The low correlations with use and understanding of standard grammatical morphemes imply that dialect use is not primarily a function of any general linguistic ability or general environmental deficit. There was, however, a significant correlation between pronunciation of grammatical morphemes in oral reading and the word knowledge test. Word knowledge as measured amounts to reading vocabulary. Oral reading of grammatical morphemes showed higher correlations with the Metropolitan reading subtest and the combined Metropolitan scores.

The Metropolitan reading subtest requires reading whole sentences with understanding and therefore does involve grammatical morphemes. One part requires the child to select one of three sentences to match what is going on in a picture. All the sentences contain relevant words, so the choice cannot be made solely on word recognition. Some sentence comprehension is required. Another part of the test shows short passages and has multiple choice questions asking such things as "When ...?", "Where ...?", and "Who ...?". Scores on the reading subtest are significantly correlated with most of our dialect measures. The more spontaneous uses of the morphemes, including the context-cue test, are least correlated, the oral comprehension next, and the reading scores most highly correlated. Articulation of the morphemes in oral reading had the highest correlation of all our measures with

both Metropolitan subtests and with the combined measure. One reason for this is that our oral reading measure was based upon reading of between 36 and 69 words containing one or more of the dialect-related morphemes whereas the comprehension tests were based upon between 8 and 19 items. Thus the range of scores and the reliability of the oral reading measure is much greater. It is also possible that a good reader is able to devote more attention to the fine points, such as grammatical morphemes, in oral reading. Thus children who have greater word knowledge and better recognition of the meaning of printed words, may read the grammatical morphemes better even though they are not particularly superior at using or comprehending the morphemes themselves.

The correlation between spontaneous use of Standard English and achievement scores suggests that there may be some value in language instruction for speakers of non-standard English, but does not in itself lead to the conclusion that children must acquire the habit of using Standard English for everyday communication if they are to be good learners. The correlation between spontaneous speech and reading is barely significant. It seems likely that spontaneous use depends upon a much less conscious or explicit kind of grammatical knowledge than does our comprehension-production test or any reading measure since it is merely part of the natural competence of all speakers of the language and does not depend upon intelligence or education. It is primarily the more explicit grammatical knowledge that correlates with the educational achievement measure. Furthermore,

from correlation alone, we cannot decide which is cause and which is effect. It is perfectly possible that it is higher school achievement that makes possible the higher scores on several of our dialect tests rather than vice versa. These data do not in themselves, therefore, point to a policy of teaching Standard English grammar as a means of improving educational achievement.

Table 3 also shows intercorrelations between different tests in our series. It shows that oral reading of s morphemes is significantly related to all our other language measures as well as to all Metropolitan scores. Our picture meaning test of oral comprehension and production is also significantly related to all except the Metropolitan word knowledge subtest. Reading comprehension, which had a very small range of scores, does not show significant relationship to the two speech measures, spontaneous and context-cued. It has already been pointed out that the two speech measures are also much less related to Metropolitan scores. This pattern of interrelations is consistent with the hypothesis that the more spontaneous oral uses of language are less consciously controlled and less a function of intellectual sophistication. Nevertheless the intercorrelations between our various tests including the most explicit, the picture meaning test of morpheme understanding, suggest either that greater explicit knowledge of morpheme meaning encourages greater use of them in speech or that a tendency to use them in speech makes it easier to understand them in more explicit tests.

EFFECTS OF TRAINING

Design

The learning experiment consisted of pretests of use and understanding of four sibilant morphemes followed by training in the morphemes and a posttest of the same kind as the pretest to determine the effect of the training. The tests consisted of 10 oral picture-meaning items (2 for each morpheme meaning), 8 context-cue items (2 for each morpheme) and sentences for oral reading which contained 2 samples of each morpheme. Alternate forms of each test were rotated between pretest and posttest so as to control for possible differences in their difficulty. The results reported thus far are the pooled scores of all test items used, pretests, posttests and test items used in the training period. This section will describe the training technique and report on pretest and posttest scores separately.

Method

Each subject met with the experimenter five times about half an hour each time at approximately one week intervals. For Session I, the first interview, two children were selected by the teacher as being either special friends or at least compatible persons. The purpose of the interview was to obtain samples of informal spontaneous speech and oral reading. An oral reading test was given as part of a board game in which the two children competed. In subsequent sessions each child came alone. In Session II they took the oral picture-meaning test and the context-cue test. They were also shown a very interesting book of riddles, which elicited more oral reading. Sessions III and

IV consisted primarily of programmed lessons on the four grammatical morphemes, plural noun and singular verb inflections in Session III and possessive and copula in Session IV. Each teaching program began with a simple statement about the use of the morpheme with several printed illustrations showing the s in red. The child then had a series of exercises in which he had to decide whether or not to put an s with a red marker in a blank provided. Cues were given in pictures or in sentence context. All words used were taken from primers used by the children to learn reading or were prompted by the experimenter. The child was prompted throughout the program by the experimenter so that all blanks not filled correctly at first were corrected. After writing all ems the child was asked to read them aloud, pronouncing s's carefully. After the fill-ins were two picture-meaning test items, one where the child entered an s in a blank to match a picture, as a test of comprehension, and the other an oral picture-meaning item and, finally, a series of sentences containing the morphemes to be read aloud.

The program for teaching the plural inflection was given first as an introduction to the idea of this kind of programming. Since the plural morpheme was used consistently by nearly all the children, this program could hardly teach them much about the use of the morpheme itself, but it gave them skill and confidence with the program method and with the general idea that s endings express meaning. Most of the program items consisted of pairs of pictures showing one or more than one of some animal or object and providing the printed word with a blank at the end of it. The

child had to select which blank to write an s in and then read both titles aloud. Any errors were corrected. The pictures were colorful, many of them traced from the children's readers, and they enjoyed doing the exercises. Some asked for more and were delighted to have the verb program to continue.

The verb program began with illustrations showing pairs of pictures in which either one or more than one child was doing something. Sentence pairs under the pictures showed both noun and verb inflections in red, e.g., Two boys run . One boy runs. with underlined blanks to emphasize zero inflections. The experimenter pointed out that when the word boy had an s on it, the word run did not and vice versa. After three illustrations, the child was shown eight pairs of sentences with subject nouns printed with or without a red s ending. The child had to decide which verbs required s and enter the letter in the blank. He then read all sentences aloud. Again the experimenter corrected any errors.

The program for teaching the possessive was given in Session IV. It began with a statement that "apostrophe s" is sometimes used to mean that "somebody has something" and several illustrative words with pictures. The child filled in eight blanks in which the possessive 's was required and then had a series of sentences with seven blanks of which only four required the s. The child read the sentences aloud and was corrected if he used or failed to use the verb s correctly.

The copula program began with sentences containing -ing verbs with blanks in place of the required auxiliary, for example,

One dog __ running. After is had been put in several such blanks, the experimenter explained that "apostrophe s" is sometimes used instead of is and showed three illustrations with 's in red, e.g., It's good. The exercise consisted of a series of five pairs of sentences, each with one -ing participle requiring 's in the preceding blank and one with a finite verb, not requiring 's, e.g., She __ jumping. She __ jumps. All items were read aloud by the subject and errors corrected by the experimenter.

In Session V each child was given the posttest, alternate forms of the same picture-meaning, context-cue, and oral reading tests used as pretests. Approximately equal numbers of children had each form as pretest and as posttest to control for the difficulty of individual items. Four forms of the oral reading test were used, each child being given three of them in counterbalanced positions as pretest, program items, and posttest.

Results

Most of the differences between language scores of the children before and after the grammatical training programs were small and insignificant. Since the picture-meaning test was the most explicit and conscious use of language tested, and since the program was similar to this test in the kind of skills required, it is not surprising to find all the significant gains in these scores. Table 1 shows mean raw scores for pre- and posttests. Chi square tests of the proportion of subjects doing better and worse on the posttest than on the pretest showed a signficantly greater number doing better on all morphemes except plural nouns and singular verbs. Since all subjects did very well on the plural

nouns in the pretest, there was hardly room for significant gain, and on the singular meaning of the verb inflection, which nearly all subjects failed on both tests, it is obvious that our training had no effect worth talking about.

Discussion

It is paradoxical that subjects gained in their understanding of the verb morpheme as a signal of tense but not at all when it signaled number since the program dealt exclusively with the number meaning. Its effect on understanding of tense can have been only through its emphasis on the existence of s endings. Obviously the children themselves applied their existing knowledge of tense meaning more effectively after the program had called their attention to sibilant morphemes in general. The results on gains confirm the impression given by the pooled data, that these various morphemes differ greatly in their status as part of the children's language and that the verb ending is psychologically two different entities according to its meanings of number and tense.

Comparing the effects of training on the different types of language performance, it seems safe to say that our grammatical training has its main influence on relatively explicit grammatical knowledge and that we have no evidence at all that it affects oral language in either speaking or reading aloud. The performances that were not affected are ones in which the meanings of the morphemes are probably less attended to, that is, fairly automatic. They are unconsciously directed responses that occur while the speaker's mind is concentrating on something

else, such as the meaning of what he wants to say. It is possible but not obvious that much more grammatical training might ultimately have some influence on the more automatic uses of language, especially on the highly controlled formal styles of speaking. Our context-cue test and oral reading seem subject to fairly conscious control, however, and they have not been significantly affected here either. Before we undertake large-scale programs of training in Standard English as a second dialect, it is clear that we need to set realistic goals in terms of the kinds of performances we would expect to change immediately by such training and the kinds of measures we would use to determine the effects of the training.

A further study of training in the verb inflection is reported in Chapter III.

ANALYSIS OF INDIVIDUAL MORPHEMES

It is worthwhile to review the data so far for each morpheme separately in order to put together the evidence regarding its status in the grammatical competence of the children. It is clear that we are measuring several different dimensions of competence. For example, frequency of use does not directly measure the same thing as understanding, and "understanding" itself is a concept with more than one meaning. Our picture-meaning test is a measure of one kind of comprehension, and explicit grammatical knowledge would be another kind. The ease of learning to understand a morpheme would be still another dimension. Educational decisions about how and when to teach a particular form might depend upon the whole pattern of competence rather

than upon any one measure.

Plural.-- Labov (1972) found the plural Z well established in the language of his male teenage subjects. About 10% omissions occured, always for specific words: cent and year. He concluded that these words together with the phonologically determined omission of final consonants accounted for most plural morpheme omissions, and therefore that its status in the grammar was almost the same as in Standard English. Berdan and Pfaff (1972) report about the same percentage of plural morpheme use among Black children in Los Angeles.

Our results are consistent with Labov's estimate of the status of the plural Z. Table 1 shows high scores for plural on all our measures. Omissions in spontaneous speech are even less than Labov's 10%. Only 6 of our 27 individual subjects had more than 15% omissions and none over 33%. The fact that plurals were read aloud and well understood in the picture-meaning test both in speaking and writing also confirms their status in the language. Our subjects may even have overcorrected to conform to standard pluralization rules. When they were shown pictures of several sheep and several deer respectively and asked what these were, all but three subjects responded, "sheeps" and all but one said, "deers." (it is also possible that these regularized plurals may be established in the dialect, not individual overcorrections.) Most of the children were able to explain in words the meaning of the plural morpheme. Of the 21 who were asked what the s on dogs meant, 17 made clear that they understood it to mean plural, e.g., "lotta dogs," "two dogs," "more

than one dog," etc. No one misinterpreted it.

It is puzzling that teachers commonly report omission of plural Z as a problem with Black children. Possibly what they observe is simply omission of terminal s's, and, since the plural is the first such ending that usually comes to mind, they may conclude erroneously that it is primarily plurals that are missing. One teacher, for example, mentioned plural omission but said nothing about verb inflections. However, the Black children in her class used the noun plural 90% of the time and the verb inflection only 75%.

One other condition for omission of a few plurals showed in our results. A riddle in the book used for oral reading and entertainment during the experiment (Cerf, 1967) asked, "How can you keep fish from smelling?" The answer printed in the book was, "Cut off their noses." Most of the children read "nose." At a later session the experimenter asked each child, "How can you keep fish from smelling?" and all 26 tested again omitted the plural morpheme on "nose" in their answer. Asked "How can you keep owls from thinking?" 17 out of 26 answered, "Cut off their head," without the plural Z. Several also reported that when the class had visited Santa Claus, "He gave us a lollypop." These observations suggest the children perceive this "one apiece" context as requiring a singular noun, as in French. Since the plural is used there by many (though not all) speakers of Standard English, it may be that some seeming omissions of the plural are the result of this difference in usage.

Verb singular and present.-- Labov found the third person singular verb inflection the least used of the Z inflections, ranging in various groups from 0 to 50% frequency. He concluded that there is no third person singular inflection in Black English, citing as confirmation several other observations which suggest his speakers were entirely unaware of any need for it. For example, his subjects had no tendency to increase its use in more formal styles of speech (as they did with the copula), no tendency to pronounce it more frequently preceding a word beginning with a vowel, and a random pattern of hypercorrection, that is, insertion of Z on inappropriate verbs. Our subjects were much like his in their use of Z on verbs in spontaneous speech and induction. Ours averaged less than 50% even though some individuals used it regularly. They did better in oral reading, when the letter s was before their eyes in print, with 76% articulation of the verb Z. On the picture-meaning measures our results were consistent with Labov's conclusion as long as we consider only the singular meaning of the morpheme. Only 8% of these items were responded to completely correctly. One psychological basis of the difficulty of this morpheme is shown in the children's reaction to these items. Many of them clearly revealed that they were giving their entire attention to the noun in the sentence in determining number. They would ask the experimenter to repeat the noun only, or in their production they would make a distinction between the nouns in the two sentences but not in the verbs. The subjects and verbs in the sentences had been chosen with the intention of obscuring

the noun plural inflection. (See Table 2.) Sheep and deer were selected because in adult Standard English they are the same in the singular and plural. The sentences with cat and rabbit as subjects had verbs beginning with unvoiced s so that subject and verb could be run together in both singular and plural in order to obscure the difference. The children did their best to thwart both methods of equating singular and plural nouns. All but one added Z to one or both of the words sheep and deer in their production of the plural-meaning sentences. (The one who omitted Z was the one who used the plural only 75% of the time spontaneously.) Many of them carefully pronounced cats and rabbits separately from the verb. Since we always presented the Z inflected sentence as the one to be selected in the picture-meaning test for comprehension, this reliance on the noun would lead to a correct choice of picture in the case of the sheep and deer items. In other words, the question "Which picture is The deer drinks?" would imply singular since the noun was uninflected. The average number of correct picture choices in comprehension of the verb Z as a signal of number (57%) was much higher than the number completely correct on both comprehension and production (8%). In the posttest, for sheep-deer items only, "correct" choices in comprehension alone exceeded chance expectation ($\chi^2(1) = 7.3$; $p<.01$). Eleven subjects improved in comprehension of these particular items between pretest and posttest and all eleven themselves pronounced Z on the subject nouns in their production of plurals. Only one also improved on comprehension and production together. Obviously they comprehend

the noun Ø inflection rather then the verb Z. In their explicit grammatical judgments, the 16 children questioned showed no understanding. (Table 1) Given the sentence, The cat says it's hers, they were asked to tell what the s on says meant. None mentioned singular and six interpreted it as plural, "more than one cat" or "the cat says more than one thing." Two used progressive forms, "sayin'" and "speaking," which implies possible understanding of present tense meaning.

Our assessment of the verb inflection is complicated by the results of the picture-meaning comprehension tests of this same inflection as a clue to tense. Singular meaning is not understood; present meaning is quite well understood. Obviously we cannot speak of "comprehension" of the verb morpheme as a whole but must speak of comprehension only relative to specific meanings. The gain in understanding of the present meaning after training with singular meaning suggests that the effect of the training was simply to call attention to the morpheme and thus enhance the child's ability to use knowledge he already had about present tense meaning. The pretest itself may also have served as teaching, although no feedback on correctness was given. Comparing comprehension with spontaneous speech, we find the morpheme used on fewer than half the occasions when it was required. If we conclude that it is used to express present meaning but not number, we would expect a large number of hypercorrections, that is, Z used with inappropriate subjects with present tense meaning. Our records actually show extremely few hypercorrections. Labov found more hypercorrections,

but he reported that they tended to be characteristic of certain individuals. Possibly we have few such individuals or possibly hypercorrection of this morpheme is not so common in younger children. At any rate, despite their more frequent use of the possessive and contracted copula than of the verb inflection, they rarely used the verb Z after plurals or after first and second person pronouns. This suggests that at some less explicit level of consciousness our subjects do have some degree of comprehension of singular meaning that would account for their ability to confine their infrequent use of the ending to appropriate subjects. This hypothesis of a subconscious competence with a rule is supported by our finding that Standard English speaking white children, and even adults, score less than perfectly on our "comprehension" test of singular meaning. The test is a difficult one even for individuals who regularly use the third singular Z. (See Chapter III.) One hypothesis to explain the relative difficulty of the singular as compared with the present tense comprehension is that in English it is normal to expect that number will be signaled by nouns and that tense will be signaled by verbs. It is reported above that our subjects showed an unmistakable interest in the noun subjects despite our efforts to make the nouns indistinguishable as to number. Thus they purposely turned their attention away from the element that was supposed to be crucial to their decision. The natural redundancy of the language usually makes this an effective strategy. On the other hand, the verb is the normal place to look for a cue to

tense in English. Evidence that the children do know how to select verbs according to the number of the subject comes from an introductory exercise in our program for teaching the copula. They were shown a printed sentence one cat ___ running, and asked to decide whether is or are went in the blank. Only three of our subjects selected are. One of these was the one with the lowest score on use of the verb Z. Another spontaneously changed to is before she wrote the answer. In spontaneous speech these subjects pronounced are in full or contracted form only about 50% of the time as compared with 70% for is. Are was almost never used where is would be appropriate (less than 1%) and is occurred instead of are about 15% of the time. Thus the effect of a singular or plural subject on the verb element in a sentence is fairly well differentiated in the case of the copula. It is consistent with our data, then, to suggest that our subjects subconsciously understand subject-verb agreement in general but regard the Z morpheme as entirely optional. This would account for their frequent omission and their failure to insert Z inappropriately.

Possessive.-- Labov found the possessive morpheme used roughly 50% of the time in attributive position before the noun and concluded that there was no underlying attributive possessive in the nonstandard dialect. However, the absolute possessive, occurring in final position without the noun, e.g., "that house is my mother's," was always used. Our results are very similar. Although the attributive possessive is not as frequent in ordinary speech as plural nouns, singular verbs and copulas,

we did have 17 subjects who spontaneously used it at least three times and most of our individual and correlation data are based on them. The mean percentage of possessive Z based on all subjects is 50%. Absolute possessives were rarer with only 28 instances spread among our 27 subjects. Of these 24 or 86% included the Z morpheme.

Contrasting with spontaneous use, comprehension was higher for the possessive than any other dialect-related morpheme tested. Our subjects understood the distinction between such minimal pairs as the man teacher and the man's teacher quite well, even before our training program and almost perfectly afterward. This suggests that understanding this particular standard morpheme is not a problem for these children. On those few occasions where it is not redundant with word order they can easily interpret it.

Oral reading of the possessive was relatively low on the other hand. The fact that it is printed with an apostrophe and a space between it and the word does not account for the problem because the same applies to the contracted copula, which is nearly always read aloud. The low percentage in oral reading is probably due instead to an accident of selection of possessives for our reading materials. In order to observe the effect of a sibilant terminal consonant, requiring an extra syllable allomorph to form the possessive, half the words for the oral reading tests were selected with and half without terminal sibilants. By accident all the sibilant words ended either in/s/ or /z/ sounds and many standard speakers form the possessive of

these words without the added syllable /ɨz/, e.g., Mr. Charles' house. Thus our subjects read only 25% of these words with a separate syllable for the possessive. With words ending in non-sibilants, the possessive inflection was read aloud 85% of the time. Thus the low percentage relative to the copula is due entirely to the choice of final sibilants.

The possessive was relatively easy to elicit by a specific question such as we used in our context-cue test. The experimenter said, "If the girl has an elephant, we say it's the ____" stopping in mid-sentence to wait for the child to fill in girl's elephant or girl elephant. Under these conditions the possessive morpheme was used an average of 70% of the time. On the other hand children did not state its meaning correctly. Asked to explain the 's in the cat's food..., 12 of them explained it as plural, for example, as "more than one cat" or a "lotta food." Only two gave answers like "It's the cat's food," which sounded as though they might be trying to express possession.

We conclude that with regard to the possessive morpheme these children are bi-dialectal, that is, they use it only half the time themselves on the average but they understand it implicitly quite well and can also use it correctly themselves if called upon to do so. The task of the teacher of second dialect, then, is to make the children sensitive to situations where it is used in Standard English rather than to teach them what it means.

Copula.-- The status of the copula in the language of speakers of Black English was also assessed by Labov. He concluded that the copula is present in the underlying structure

of the language, and that its absence from many sentences is the result of a rule extending the Standard English rule for contraction to allow for optional deletion also. Our observations confirm his findings in that our subjects always used the full form is in contexts where contraction is impossible in Standard English and no individual used it fewer than 2 times out of 10 possible occasions in contexts were it may be contracted. It is the most used of our three dialect-related morphemes, averaging 80% for all subjects. It is also most often articulated in oral reading and understood in reading comprehension. The only measure in which the copula use is low relative to the other morphemes is in the picture-meaning test score based on both comprehension and production. In comprehension alone (selecting the correct picture to match the phrase with the copula) scores were much closer to those of the other dialect-related morphemes (76%). It was in using the copula in naming the pictures that the frequency fell to 46% (Table 1). Comparing the performances before and after the teaching program, where they were drilled on using the contraction of is, we find a larger gain than for any other morpheme, although total use is still relatively low. It is as though they learned to increase their use of the copula in this context, but retained the optional character of it.

Whatever the status of the copula in their underlying competence, the meaning of the contracted copula was apparently not easily put into words. After reading the phrase The cat says it's hers, they were asked to tell what the 's meant in it's. Only 2 of the 16 subjects questioned were able to say it meant is.

IDIOLECTS: THE LANGUAGES OF INDIVIDUAL CHILDREN

A report on a language shared by any group of people gives a false impression of uniformity, as though there were some average pattern from which all deviations were accidental or unimportant. Showing the average use of each morpheme for the whole group implies that the pattern of relative frequency for each child is similar to that of the group, when in fact it is not. There is no such thing as "the child's language" or even of "the Black child's language." Every child is an individual in language as in everything else.

Table 1 showed the mean percentages of standard usage and mean numbers of correct test responses for all 27 children. Tables 4-7 show the patterns of scores for four individuals whom we have named Sandra, Sammy, Bettye and Keith. Some detailed comparisons of these tables will help to indicate the limitations of averages and correlations. For example, on the average the children were much more standard in their use of the copula than of the verb inflection, with the possessive falling between. Yet Sandra (Table 4) used the verb inflection more

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Insert Table 4 about here

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often than the copula and the possessive not at all. Sammy (Table 5) used the possessive much less than the other two

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Insert Table 5 about here

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inflections. Bettye (Table 6) used the possessive and copula s

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Insert Table 6 about here.

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in every instance, but the verb inflection less even than the average. There was a significant correlation between the Metropolitan Reading score and standardness of spontaneous speech, yet we find Keith (Table 7) with Metropolitan scores well above grade

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Insert Table 7 about here.

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level and a percentage of standard speech only half the class average. Sammy, with the lowest Metropolitan scores in the class, had an average percentage of standard s's. Similarly with our picture-meaning test of grammatical comprehension, there is in general a significant correlation with spontaneous speech. Nevertheless, Keith, whose language is much less standard than average, does better than most on the picture-meaning test, and Bettye, whose language is more standard than any other of the four, does relatively poorly on that test.

It is clear from these details that scores on language-related tests are not a simple function of standardness of spontaneous speech and that standardness itself is not a general characteristic, but, as already shown by the only moderate intercorrelations between dialect-related morphemes, varies somewhat independently according to the form.

THE EFFECT OF THE SPEAKER'S SOCIAL ATTITUDE ON DIALECT CHOICE

One of the facts that impresses itself upon the experimenter

who is gathering data with which to measure individual children along specific dimensions of variation is that the individuals also differ simultaneously along many other dimensions. Children taking tests of any kind, for example, differ in their approach to the test, their attitude toward the experimenter and their concern about the experimenter's possible judgment of them. Thus each child constructs in some degree his or her own social situation even though the external "stimuli" are the same as for others. An individual reacts, not to stimuli directly, but to his or her own "life space," which is partly a function of the individual's own personality and world view. There is much evidence to suggest that the individual's social life space influences the style of language used, and it is therefore worthwhile to explore whether we can find any relation between dialect selection and social life space.

Labov (1966) has shown that certain dialect features are strongly influenced by the social situation, specifically by the degree to which the speaker is consciously attempting to control his or her language. If the interlocutor asks a question whose obvious purpose is to show how the speaker pronounces words, the pronunciation elicited may be quite different from that of spontaneous speech, the difference commonly being in the direction of pronunciations characteristic of a higher socioeconomic class. In other words, people conform more to prestige norms when they are attending carefully to their own speech. In this case the external stimuli shape the life space into a situation requiring care in self-presentation. Individuals

may differ, of course, in the effect that self-consciousness produces on their language. Trudgill (1974) found the women in Norwich, England, differ from men in the extent of their concern about conforming linguistically with prestige norms. He suggested that women may feel this way because they have a less secure status in society and are more dependent for status upon their appearance or speech than upon their occupation. The norms accepted for upper class speech, then, have more appeal to them than to men whose status is tied to their work. Labov (1972 e) has also shown that selection of linguistic forms by individuals depends in part upon their social preferences, on their attitudes toward the culture that uses a given form. Residents of Martha's Vineyard who admire the island life and traditional values use the vowel which is distinctively characteristic of the Vineyard much more than those who feel negatively about Vineyard life.

Getting closer to the life and language of our own subjects, Labov's studies of somewhat older boys in a neighborhood not far from the school where we worked (1972 b) showed that boys who belonged to named street clubs spoke a less standard English than their contemporaries who were "lames," or loners not affiliated with street groups. Club members also were significantly poorer readers, a fact which Labov attributes to their failure to identify with the linguistic and other norms of the school social setting which contrasted with those of their more important social affiliations in the street.

Our observations of each child in our sample included notations concerning their apparent attitude toward the testing

situation. These observations, together with comments from the teacher's records, were assembled into a short personality sketch of each child. The original purpose of making the sketches was to illustrate that there were differences between individuals in order to show that any social generalizations or stereotypes should be formed with the utmost caution. The experimenter who prepared the sketches had in mind no particular variables or typologies. However, it was possible many months later to use them to assess the extent to which each child's motivation in the testing situation was oriented toward the kind of impression he or she might be making on the experimenter or was simply an expression of his or her individual purposes, uninfluenced by any concern with the experimenter's opinion. The experimenter was perceived by most children as "a teacher" and thus a member of the predominantly white authority structure of the school. It may be inferred that children who accepted the school social milieu would be more likely to take an interest in the experimenter's attitude and more likely to be trying to control their own behavior so as to make an acceptable impression. It is plausible that their language might be one of the kinds of behavior they would control to make this impression. Thus we might expect to find more standard usage among the children who showed interest in the experimenter's point of view than among those who perceived the situation primarily as a place in which to express themselves without regard to the opinions of others.

To get evidence on this question, the experimenter and two

other adults rated the 27 personality sketches on a scale ranging from a pole labeled "self-expressive: concerned with own feelings" to "self-controlled: concerned with impression on others" (the only "other" in the situation having been the experimenter). In many instances the sketches gave little or contradictory information about such attitudes. Individuals who received neutral ratings from any of the three judges or any conflicting ratings were excluded, but seven individuals were selected on whom all three raters agreed that they belonged nearer the expressive end of the scale and eight on whom all the raters agreed in placing them nearer the self-controlled end. Tables 8 and 9 show sample sketches of children classified

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Insert Tables 8 & 9 about here.

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in each group.

Comparison of the language of these two subgroups showed that the mean Standard English score for the self-controlled group was higher on all measures than that of the expressive group, although in some cases the differences were not statistically significant. Table 10 shows the scores for the two

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Insert Table 10 about here.

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groups on several measures combining our three dialect-related morphemes. In spontaneous speech and context-cue tests the self-controlled group used significantly more standard _s_ morphemes. On the picture-meaning test, the results are not

significant for the comprehension-production measure used elsewhere, the number of items on pre- and posttests combined in which both comprehension and production were correct for Standard English, but an alternative measure called I-C-P, based upon the number of correct responses to all separate questions in the test did show a significant difference between the groups in the predicted direction. This score is shown because it has a wider range of variation and thus permits easier comparison of pre- and posttests. The gain from pretest to posttest in this picture-meaning test might be expected to be greater for the self-controlled group, since they might have tried harder to profit from instruction by the experimenter. This hypothesis was not supported since the difference in gain was not significant.

In combining the scores for all three dialect-related morphemes, we have concealed any possible differences in the sensitivity of different morphemes to the kind of social control we are trying to assess. The fact that our subjects showed improvement in standard usage from pretest to posttest on the use of the contracted copula in the picture-meaning test (See Table 1), but not on the singular meaning of the verb inflection, suggests that the copula is more accessible to conscious or semi-conscious manipulation by the individual, whereas the verb inflection is further from awareness. Table 10 gives evidence to support the hypothesis that the verb inflection is also not as likely to change with perception of the social situation. The two groups differ considerably and significantly in their use of the copula in spontaneous speech, in the context-cue test, and in their responses to the picture-meaning test, but in none

of these scores do they differ significantly in their use of the verb inflection.

Our expressive children are so classified because of their behavior toward the experimenter and the experimental situation. A "teacher" in school did not apparently belong to any reference group which was relevant to them. We have no information about their other affiliations, so we do not offer our ratings as indications of their general personality traits, but only of their behavior in this particular situation. For the self-controlled groups, the experimenter did seem to be part of a reference group they considered relevant. This difference in orientation toward the experimenter seems to have an effect upon their language, especially so in the case of the contracted copula. That the difference may affect their more general performance in school is suggested by the fact that the self-controlled group also had slightly higher mean scores on the Metropolitan Achievement test administered by the school. The difference was significant ($t(12) = 1.91$; $p<.05$) in the case of the Word Knowledge score, but not for Reading.

OTHER SPONTANEOUS USAGES

Questions

In forming Standard English questions a transformation rule is normally applied, reversing the declarative position of the subject and auxiliary. For example,

Can I play two games?

Is this your same room?

Do you like microphones?

What *is a fair fight*?

What *do angels* do?

The children in our group, however, often omit the subject-auxiliary reversal transformation in forming their questions, using declarative word order and only a change in intonation or a Wh word to mark the question.

You wrote all this?

That's right?

What *they did*?

Table 11 shows the proportion of their questions in which the

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Insert Table 11 about here.

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rule is clearly applied out of the total number of questions where it would be applied in Standard English. The questions are divided into *yes-no* and *Wh* types and classified by the kind of auxiliary used, since the results showed that these were relevant variables. Only 60 (29%) of the 210 yes-no questions were formed with a reversal transformation. Of these reversed questions, two-thirds involved the modal auxiliary "can" or "could," so that 87% of the modal questions as compared to only 13% of the non-modal auxiliaries were reversed. The difference between the proportions for modal and for all other auxiliaries is significant ($z(208) = 22.86$; $p<.001$). By contrast about half the Wh questions were reversed, a proportion significantly greater than that of yes-no questions ($z(267) = 10.37$; $p<.001$). This difference may reflect the fact that yes-no questions with subject and auxiliary in declarative position are more accept-

able in Standard English than Wh questions without a reversal. It is the normal form of questions asking for confirmation. However, a sample of questions from a group of white second graders in a predominantly white middle-class school in New London, Connecticut, showed very few such questions. Table 11 shows that only 6% (3 questions, 2 of them confirmation questions) failed to employ the reversal rule:

You don't know what fiddling around means?

You don't know what summer camps are?

You know how big those are?

The difference between these Black and white children in proportion of reversed questions other than those employing the modal auxiliary is significant both for yes-no questions ($z(182) = 19.66$; $p<.001$) and Wh questions ($z(129) = 12.25$; $p<.001$), the white group using the rule more often.

Since the reversal rule calls for transposing the subject with the auxiliary, sentences without auxiliaries require the insertion of a "dummy" auxiliary, do.

You know.	becomes	Do you know?

The tense marker and also the negative go with the auxiliary.

You knew.	becomes	Did you know?
You don't know.	becomes	Don't you know?

Our Black subjects produced 10 affirmative yes-no questions using the reversal transformation with do.

Do you have any sisters?

Do you know who was the boy?

Did the lady tell your mother?

However, in 18 seemingly present tense questions, the do was omitted.

You mean you like reading?

We hafta go?

Although we are attributing the lack of do in these questions to a failure to apply the reversal rule, it is possible in the present tense that the omission is an ellipsis. However, in 21 past tense questions where did would have occurred in a reversed form, the form actually used could not have been due to ellipsis.

You made that?

You wrote this from the book?

If did were simply deleted, the verbs in these cases would have been make and write. On the basis of these past tense questions we have treated the lack of do to a failure to apply the reversal rule. The percentages in Table 11 are based on this assumption.

The fact that the auxiliary must carry with it the tense inflection and the negative morpheme clearly influences our subjects' tendency to make the reversal. 36% of the positive present tense do questions were reversed but only 8% of the past tense questions. In the six cases where the question was negative so that don't was required, our subjects never used the reversal rule. Of the white children's three non-reversed questions quoted above two also involved don't rather than do. It seems possible that the dummy auxiliary carrying a past tense (did) or negative morpheme (don't) is less movable grammatically than present positive (do).

Invariant be

It is reported by linguists (e.g., Labov, 1972) that Black English uses be in invariant form as a copula in situations where the meaning is a usual event. If we add also the situation where a background condition is referred to, we can report that our observations are consistent with these linguists' findings. For example,

What you doin' when you be in that room?

It be like dat.

If dey be in de game....

Sometimes it is possible to interpret this usage as occurring because of an inaudible will in will be, for example

My sister be asleep ... My mother be awake,

you know, she'll still be awake.

In this series of utterances from one of our subjects who was talking about something that happens every Wednesday night, the will is clearly audible toward the end, suggesting that its absence might be due only to a phonological rule deleting the terminal /l/ which is the contraction of will. This use of will has a meaning of regularity, related to the future only in the sense of being predictable. Although most of our instances of the invariant be allow for this interpretation, there are times, as in the first examples given, when it is difficult to interpret the invariant be as part of will be. The phrase don't be, which is common in Black English, cannot be considered that way.

Ten of our subjects used this invariant be and only the one quoted above ever expanded it into will be. In all cases

reference was to a usual event or condition. To determine whether these 10 had relatively nonstandard speech, we compared their mean percentage use of the three dialect-related sibilant morphemes with the mean for subjects who did not happen to use be. Users of be averaged 49%, and non-users 63%. This difference is not statistically significant. There is no evidence here, then, that use of invariant be is correlated with general nonstandard dialect.

Negative concord

Labov et al. (1968) report that Black nonstandard speakers almost invariably form negatives by what he calls concord, that is, negative morphemes at all possible places in the sentence rather than the standard usage in which only one negative applies to the whole sentence. Our subjects confirm his finding in their spontaneous speech with sentences like

I don't have nothing.

Nobody can't beat nobody.

Labov reports that negative concord is a variable rule. White nonstandard speakers would often say instead of the above

I don't have anything.

Nobody can beat anybody.

He also reports some Black nonstandard speakers deviating occasionally from strict negative concord. Twenty-two of our 27 subjects used at least one negative sentence containing indeterminates and all of these utterances followed the negative concord rule. No completely standard negative sentences occurred in any of these observations. Three out of the four most

standard speakers used negative concord at least twice. The fourth used no negatives with indeterminates.

Table 12 shows the frequencies with which our subjects

Insert Table 12 about here.

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used each of four types of negative sentences. The results of applying standard and negative concord rules are illustrated for each type. The frequencies for three other groups are also shown for comparison. The first grade group came from the same New York school as our second grade subjects. New London (Connecticut) High School students in developmental English classes are divided into Black and white. In the second grade only one sentence deviated partially from the negative concord rule. A very prim little boy said

My teacher would never let me write with no magic marker.

Even here he used the negative concord rule in the case of the post-verb indeterminate, but apparently did not couple the auxiliary with not. Two first graders also threw in a post-verb any in otherwise negative concord sentences.

Dat not no doggie any ol' way; dat's a poodle.

Nobody don't never (do that) anyhow.

With these exceptions the negative concord rule was used exclusively, with the post-verb indeterminate being by far the most frequent. The high school groups agree in their use of negative concord in their few sentences with hardly, but otherwise they are both more inclined than the younger children to use standard forms. The speech in all cases was recorded in

a school setting with a white "teacher," which may dispose students to a relatively standard from of language. Nevertheless both Black and white use a substantial number of double negatives in the case of post-verb indeterminates. They also use more sentences with subject indeterminates and never than do the younger children. The whites are much more likely than the Blacks to use the standard negative rule.

REPETITION TESTS

Labov et al. (1968) found that teenagers, when asked to repeat a standard sentence after hearing it, often converted standard into nonstandard forms and in some cases were unable even with much effort to reproduce the standard original. Our second graders repeated after the experimenter many short phrases during the imitation part of the comprehension experiment and in addition there was a game in which they repeated longer sentences. We classified separately the repetitions of phrases and sentences less than seven morphemes long and the longer ones. In addition, several nonstandard sentences were presented to some of them to see whether they would ever convert them into the corresponding standard forms. There were very few errors in the repetitions of shorter models, and although there were more errors in longer sentences, even there over three-quarters of the repetitions were correct standard forms, considerably more than in the spontaneous speech of the same children. Even some nonstandard sentences were "corrected" to standard more than one-fourth of the time, in spite of the fact that the instructions called for exact repetition of the

sentence as given, in other words, for nonstandard responses to those sentences. (White college students, given sentences with the same Black nonstandard forms and the same instruction, corrected to standard English slightly more often than these children on most morphemes and much more often on the possessive.)

Beside the contrasting forms studied in our experiment, a number of other standard forms were tested, all sentences being modified from those used by Labov by inserting names of children from the class. Several of these are worth examining.

The following sentence was designed to test ability to repeat standard negative attraction:

None of us ever have any candy in school.

Using the negative concord rule, as all of our children did exclusively in their spontaneous speech, this would be

None of us never have no candy in school.

Three kinds of "repetitions" of these standard forms occurred among our respondents. A considerable number of subjects were uncertain enough of the standard indeterminate forms that they either evaded the problem by omitting the indeterminates or made them negative in conformity with the negative concord rule. They were much more likely to convert "ever" into "never" than to convert "any" into "no" in this sentence, however. Each of the standard indeterminates was retained by more than half of the 27 respondents but only about a third retained both indeterminates. No one converted both to negatives in full accord with the concord rule.

Labov also found that his subjects often converted standard

embedded yes-no questions into nonstandard form in trying to repeat them. A sentence such as,

Ask Rodney if he has ever eaten spaghetti.

would often be repeated as

Ask Rodney has he ever eaten spaghetti.

We asked our 27 subjects to repeat four such sentences and found that they correctly repeated the standard about 77% of the time. It was not possible to make a systematic comparison with their spontaneous speech since only two of the subjects had happened to use the standard "if" form in their spontaneous speech samples and only three had used the nonstandard form. These individuals' spontaneous forms, however, did not predict their performance on repetitions.

III. NEW LONDON COMPARISON SAMPLES

In order to assess the specific effects of speaking a nonstandard dialect upon our various language measures, it is necessary to test standard-speaking children of the same age. Members of a second grade class in a predominantly white middle-class school in New London, Connecticut, served as a comparison group. Data are presented for white children only. The spontaneous speech of a randomly selected half of the class ($\underline{N} = 15$) was collected in the same manner as the Harlem speech, interviews during school hours with pairs of children. The other 15 members of the same class were given the context-cue and the picture-meaning tests. Since the training and retest part of the experiment was omitted, these data are comparable only to the pretest results in the Harlem sample. A fourth grade class

of 18 from the same school was given the picture-meaning and context-cue tests, and, in addition, both classes took a new test of explicit grammatical knowledge of the same morphemes.

COMPARISON DATA ON SPEECH AND COMPREHENSION

Description of Tests and Results

Spontaneous speech.-- Table 13 shows that these white

Insert Table 13 about here.

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middle-class second graders use all four of our sibilant morphemes almost 100 per cent of the time. All three dialect-related morphemes are used significantly more often by them than by the Harlem sample. This confirms that children of this age who are exposed to Standard English in all aspects of life have mastered the use of these particular morphemes and use them more regularly than the children who are also exposed to a dialect that does not include them.

Context-cue test.-- A more formal test of morpheme use was our context-cue test, a series of questions designed to elicit utterances that require each morpheme. Table 13 shows the mean percentage of appropriate utterances where the sibilant morphemes were used by all groups. The white second graders use all the morphemes most of the time. The fourth graders come a little closer to 100%, but the differences between the two grades are not significant. The Harlem group, however, produces each dialect-related morpheme less often. The differences between white and Black second graders are

statistically significant for verb ending, possessive, and for all dialect-related morphemes together.

Picture-meaning test.-- The test (described in Chapter 4 above) involving matching pictures to the meanings of the morphemes requires something much closer to explicit grammatical knowledge than spontaneous production in ordinary speech and in our context-cue test. The difficulty of the test, however, makes less-than-perfect scores likely even for someone who normally uses the form spontaneously. Table 13 shows the scores for four groups in terms of mean number correct out of two items given to each child. One group of Black children is our Harlem second grade. The other is a group of 17 New London second graders who were tested outside school at a settlement house and other neighborhood settings. The two white groups are the second and fourth grades described above. The order of difficulty of the morpheme tests is almost the same for the different groups, but the white children, who use these morphemes consistently in all their daily speech, show significantly greater comprehension on all except the plural, which is well understood by all groups. The Black New London group shows results more similar to the Harlem group than to the white New London groups. The white fourth graders do a little better than the white second graders on each morpheme but the difference reaches significance only in the case of the total score for all the morphemes including the plural.

Discussion

The spontaneous language data from a comparison group

establish the fact that white children in the same grade as our Harlem sample conform much more closely to adult Standard English than do the Black children who are exposed to another dialect. It is safe, than, to attribute the deviations from Standard English shown in the Black children to cultural context rather than simply to their age. The results of the picture-meaning test in the white sample also serve as a base line, showing what we have a right to expect on this test from children who speak Standard English. Since the Black children scored significantly lower than white only on the morphemes they tend not to use themselves, it appears that dialect is the main factor in their comprehension difficulties. This conclusion is consistent with the fact that dialect instruction also had a significant influence on picture-meaning comprehension for these Black children.

GRAMMATICAL KNOWLEDGE

Method

In the Harlem experiment explicit grammatical knowledge of sibilant morphemes was tested by giving the children two typed sentences containing the forms with the "s's" in red and simply asking for each s what it meant. It is reported in Table 1 that most of the children were able to interpret the plural very well, but there were few correct answers on any other morphemes. This may reflect the children's lack of adequate grammatical vocabulary as well as the abstractness of the necessary concepts. It seemed possible that if the questions could be given some more concrete referents in the test itself, then more explicit answers could be obtained. Therefore a new test was

designed using the same pairs of pictures and phrases as the picture-meaning test of comprehension of the morphemes. The picture-meaning test was administered first in the normal oral form, and then one pair of pictures for each morpheme was presented again along with typed cards showing the two phrases with the crucial s in red. The child was asked to put the cards on the appropriate pictures (the reading comprehension test). If the response was wrong, the experimenter corrected it. Then, with the phrases visible under the correct pictures, the experimenter asked, "Now, what does the red s tell you? How do you know the one with the red s goes with this picture?" The pictures made the distinctive meaning of the s more visible and thus gave a more concrete meaning to the question as well as a clue as to how to answer. For these reasons it should be an easier test. The picture test was given to the three New London groups just described: a second and a fourth grade class in a predominantly white school and Black second graders in their own neighborhoods. The scores of the Harlem children cannot be directly compared to those from New London, of course, since the test was different, and therefore in Table 14, which summarizes the grammatical meaning responses, the Harlem scores are shown in parentheses. To the extent that the results are similar, however, they may be of interest. The questions were asked in the same way to all three New London groups and thus represent a controlled comparison of two ages as well as two cultural groups. The spontaneous speech of the Black neighborhood groups was not specifically measured for use of the morphemes,

but their performance on the picture-meaning test as well as other observations among Black New Londoners suggest that their dialect is very similar to that of the Harlem group.

Results

Several kinds of answers were received, some clearly scorable as correct or incorrect and others ambiguous. Some answers consisted of repetitions of the same forms asked about, which could mean that the child understood the morpheme but was unable to express it in abstract terms. On the other hand, it does not provide clear evidence of understanding. Two other distinct categories of answers were, first, those that interpreted the s as having the meaning of some other s morpheme (s's are most frequently misinterpreted as plurals), and, second, answers we have called "descriptive," those that seem to explain the s in terms of sound-symbol representation, the s simply representing the fact that the sibilant sound is in the word with no reference to its meaning. Such an answer implies failure to understand the question as we intended it. Table 14 shows the percentages of answers that contain some identifiable reference to the correct morpheme meaning.

Plural.-- The plural ending is well understood by all groups of children. The two dialects represented both include this morpheme and in addition it has a concrete, easily expressed meaning. The Harlem children who failed this question tended to resort to descriptive answers, perhaps misunderstanding the question, while the New London second graders who missed it interpreted The boys ate (plural) as past tense, as though it

were a contraction of The boy has ate (many children do not use the irregular participle eaten).

Verb singular.-- In the case of the verb inflection, to show recognition of its singular meaning it is necessary to say that the s on the end means "only one," the opposite of the meaning of an s on a noun. The Harlem children simply never said this, whereas a majority of the New London groups did. The New London test had two pictures, one showing a single cat (or deer) doing something and the other showing more than one. The answer "Only one" could have been more determined by the obvious difference in the pictures than by specific understanding of the s morpheme, since the question was "How do you know the one with the s goes with this picture?" In the case of the cat picture, the two cards said The cat sleeps and The cats sleep. One child explained clearly how he made the decision:

E: Why did you put this one (cat sleeps) with the green picture?"

S: "'Cause s here on cats means more than one cat is asleep."

E: "Why did you put this over here with the red s (sleeps)?"

S: "For the same reason. I started with this one (cats) and ended up with that one, so I knew it had to be that one."

Although he was the only one who made it explicit, it was obviously possible for those who received the cats item to select the plural picture on the basis of the noun ending, put the verb s with the singular picture by elimination, and then answer the question on the basis of the pictures without seeing any connection with the verb ending. This possibility is further suggested by the fact that those who received the alternate

deer item instead, where there was no extra clue to number in the plural, accounted for all but two of the incorrect answers. In the comprehension test where the children had to select the correct picture to match the phrase "The cat sleeps" (pronounced so as not to reveal the s on cats) many failed who later "passed" this version of the grammatical knowledge test. It is fair to be suspicious of "knowledge" stated in words that is not accompanied by the ability to match the pictures and phrases correctly. There was no correlation between results on the comprehension test and the grammatical knowledge test on this morpheme, although, as we shall see later, there was such a relationship for the possessive and copula.

The pattern of errors may also reflect dialect in that the white children tend more often to give answers that suggest they interpret the s as meaning present tense, in other words, they respond to it as being associated with the verb meaning. The Harlem children, who often do not put s's on verbs, also tend to guess other kinds of meanings, such as plural. The Black New London children, however, answer like their white compatriots to the questions in the form they were asked in New London. (Among developmental English students in the New London High School, however, whites did better than Blacks on a similar test. (See Chapter IV.)

Verb present.-- Understanding of the present tense meaning of the verb inflection was tested by a separate set of pictures (those contrasting tense meaning) in the case of the New London groups. The pictures make it much easier to answer in terms

of tense. Although tense meaning was quite well understood in Harlem, on the comprehension test for tense, only two children explicitly even came as close to that meaning as using the present progressive tense to indicate the ongoing event. This makes it clear that lack of explicit knowledge does not imply inability to understand a form in use. The Black children in New London, who had the benefit of the picture form of the test, performed nearly as well as the white children. The white fourth graders and the Black second graders a little more often than the white second graders used adverbs to express the time difference, which is slightly more explicit than simply using the present progressive. Only one white child and three Blacks failed to give one or the other correct answer on this item.

Possessive.-- The Harlem form of the test yielded almost no explicit statements of possession, the only one being "A lotta cats and they have a lotta food," an answer that was classified primarily as a plural. The Harlem children's overwhelming choice of the plural interpretation in defiance of the picture is in sharp contrast to their relatively good scores on the picture-meaning test of comprehension of the possessive. An inadequate vocabulary does not completely account for the difference because these children all use words like have and got and his, commonly used to express possession, but for some reason they do not use these words in answering this question.

The contrasting phrases used to test the meaning of the

possessive, e.g., the man's teacher and the man teacher were quite different grammatical constructions and thus the meanings of the two were asked about separately. In this form of the test, Black children in New London perform as well or better than the comparable white group, suggesting that dialect itself may not make much difference in this kind of knowledge. The New London children who could not give a clear possessive answer mostly chose either to repeate the possessive form being asked about, e.g. "She is the man's teacher" or to point out that two distinct people are being talked about in contrast to the meaning of the man teacher. The latter phrase, with one noun used as an adjective, found the fourth graders doing better than the second graders in stating that the two nouns refer to the same person, "The man is a teacher." Several resorted to simply repeating the phrase and a few tried to make the s into a different morpheme. No comparable question was asked of the Harlem children. The New London Blacks were very similar to the whites except for three clearly incorrect answers. A significantly higher proportion of those who were able to express possessive meaning selected the correct picture for the man's teacher and the boy's angel ($z(30) = 3.45$; $p<.001$). This relation will be shown also to hold for the copula, but did not for the verb singular.

Copula.-- In finding phrases identical in sound except for the presence or absence of copula, we resorted to past participles which were homonymous with adjectives. Since these were all spelled differently, we had to use peculiar spelling

in order to present almost identical phrases in writing. However, the children did not protest when we pointed out that there was a "misprint," e.g. the boy bluw (for blew) and the boy's bluw (for blue). It would seem fairly easy on both tests to interpret the contracted copula simply by giving the full form is, and the majority of New London children did. However, not all second graders gave this answer and only two in Harlem even though they all use both is and its contraction in their own speech. The Harlem children use it less consistently, but their comprehension was 76% correct in selecting the correct picture to mean, for example, The duck's red. Black children always pronounce the s in it's in their ordinary speech, but usually omit the t. The resulting "iss" may be harder for them to perceive as two words, especially when for them the is is optional. The New London children were asked the grammatical question about contracted copulas following nouns, so their task of segmenting the two words was easier. Nevertheless the New London second graders often interpreted the 's as another morpheme as did the Harlem children for The duck's red. The reading "The duck has read" (past tense) or "The ducks read" (plural) are perfectly possible in Standard English, although neither is reflected in the picture contrast. A possessive interpretation would not fit either pictures or phrases exactly.

Enough errors occurred both in comprehension and grammatical knowledge of the copula to make possible a comparison showing whether there was any correlation between these two performances. Those who were able to select the correct picture

for the duck's red and the boy's blue were significantly more often able also to say that the 's meant is than were those who failed the picture meaning test ($z(30) = 4.63$; $p<.001$). This contrasts with the situation for the singular meaning of the verb s, where comprehension results were about the same for those who could and could not state the meaning of "only one."

Discussion

Table 14 summarizes the percentages of correct explanations

Insert Table 14 about here.

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of the meanings of five morpheme meanings. The plural and the present tense appear easiest to express, but fourth graders succeeded well on all five. Substantial numbers of second graders, also, managed to give answers that were clearly correct when the picture-contrast test was used. Substantially lower percentages on all but the plural morpheme in the Harlem study may reflect in part the substantially lower use of these morphemes among Black children, but in view of the results for Black children in New London, it seems likely that the most important factor in the difference is the lack of as much concrete assistance from the pictures in identifying the crucial contrasting meaning. That many of them understood the morphemes in that they were able to select the correct picture is also shown in Table 14. Again inability to put the meaning into words obviously does not imply complete lack of understanding.

Although the picture contrast test seems to make grammatical knowledge more accessible, the results with the singular meaning

of the verb s suggest the need for still another test in which answers could not be derived mainly from the picture contrast but would depend upon understanding of the morpheme itself.

THE EFFECTS OF INTENSIVE TRAINING ON THE VERB INFLECTION

The Harlem learning experiment showed three things: one, that children in the second grade can be taught something about grammatical morphemes; two, that the verb ending has two meanings of which one was well understood and the other not at all; and, three, that alone among the four Z morphemes tested, the singular meaning of the verb ending was still not understood after training. Failure to teach the verb ending successfully could be accounted for in several ways. First, this morpheme has less status in the Black dialect than either the possessive or the copula. Although the possessive and copula do not always occur in all grammatical contexts, they do occur regularly in some, showing that they are part of the language. It is possible, then, that our success with these other two morphemes reflects the fact that they were partially known already and we were merely extending their use. In that case, we should wonder whether our method can work in the case of more alien forms, like the verb Z. There are other reasons, however, for suspecting that the verb singular Z would be more difficult than the others structurally, not simply because of its lack of status in the dialect. In the total context of Standard English forms, it holds a contradictory and redundant place. It happens to have the same phonological shape as the plural morpheme, yet it has the opposite meaning. Furthermore, singular-plural

meaning is usually represented in an English sentence by an ending attached to the noun. Most English verb endings refer only to tense, and this may account for the relatively better understanding of the tense meaning of this morpheme. Only in the present tense and only in the third person does number influence verb endings. Even then the noun also bears a number inflection, and the verb ending is therefore nearly always redundant within a sentence. Our children obviously focused their attention on the noun in trying to solve our verb singular comprehension test, often adding Z to deers or sheeps in their responses. For all these reasons, we could expect greater difficulty with teaching the verb ending. Further evidence for the difficulty of this ending comes from the study of white children on the comprehension test described earlier in this chapter. These children, who used the morpheme consistently themselves, still failed the verb Z test about a third of the time, more often than they failed any of the other morphemes. The present experiment was a more concentrated effort to develop understanding and use of the singular meaning of the verb inflection with an expanded instructional program and with more complete pretests and posttests. (Torrey & Silverman, 1971)

Method

Instructional program.-- The program for teaching the verb ending in the Harlem experiment had consisted of very concrete descriptive grammatical explanations followed by pairs of printed phrases with singular and plural subjects and blanks at the ends of both verbs. It was completed in one session along

with the plural program. In the present experiment only a verb program was used and it was expanded to four sessions. Sessions I and II introduced the s ending as a contrast to the -ed ending, thus giving practice in using the s as a clue to the tense meaning, which is likely to be already well understood. Session II ended with a series of six fill-ins requiring the verb s. Session III started with a singular-plural verb distinction that Black children already know, the distinction between is and are. Items that required distinguishing singular verbs with s and plural verbs with Ø endings followed immediately after the is-are pairs, thus relating the verb Z to an existing distinction in the child's language. Session IV incorporated the grammatical explanations and illustrations from the Harlem program and followed these with seven drill items in which the singular or plural meaning that conditions the choice of the verb ending was clearly illustrated in a picture as well as shown in the verbal context by a plural subject. These sessions occurred at one-week intervals, so that five weeks intervened between pretests and posttests. The programs for these sessions were improvements over the original in three ways. First, they were longer and involved more practice. Second, they consistently required attention to the meaning of the s ending made concrete by necessary reference to contrasting pictures. Third, they built systematically upon relevant existing knowledge.

Tests.-- The tests of the verb morpheme consisted of an oral form of the comprehension and production picture meaning test, reading form of the same test and an illustrated context-

cue test in which the sentences were presented in writing as well as orally and the child responded by filling in the word as well as saying it. Thus speaking, listening, reading and writing the Z morpheme were all tested.

The picture-meaning test was constructed in four alternate forms, each with three verbs representing the three allomorphs of the Z morpheme. The singular-plural difference in the subjects of the sentences, which would normally give another clue to matching the pictures, were obscured in various ways so that the verb alone had to be used in judging number. Table 15 shows

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Insert Table 15 about here.

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the items in all four test forms. One item used sheep or deer as subject, one used a verb beginning with a voiceless /s/ to obscure the Z ending of the noun, and the third used a subject ending in -man or -men which could be pronounced and printed -mun for both forms. Each test began with a single item in which the noun plural ending was the criterion for selecting the picture. This item served to make the procedure clear to the child before the three verb items which were to be scored. Table 15 shows the phrases as they were printed for the reading test. Each child had two forms in the pretest, one for the oral comprehension and production test and the other for the reading test; the same child had the other two forms in the post-test. Each form was used equally often for all four purposes.

The context-cue test items are shown in Table 16. In

Insert Table 16 about here.

Parts I and III of each, the children were asked to read the sentence and fill in the missing word, which would be the verb in the third person singular form. After they said the word, they were instructed to write it in the blank. In Part II only the missing s was to be filled in. If the children did not fill in the blank the experimenter asked whether anything went in the blank. If they said, "No," the experimenter asked whether there was supposed to be an s in the blank. The score was higher if the s was entered earlier in this sequence of questions. To get a maximum score, the s had to be given everywhere and only where it was appropriate. Two forms of the test were constructed, one form to be used as a pretest and the other was a posttest for each subject. The forms were rotated between pretest and posttest for different subjects.

Subjects.-- The pretests were administered individually to 24 children in a special summer school class for children who needed extra work. All had just completed second grade. Half the children were white or Puerto Rican and half were Black. Twelve who scored low on most tests were selected for the program and posttest. Of these 7 were Black and 5 were white. White children might score low for two reasons: one, that they attend integrated schools and may have acquired some features of Black English from their friends, or, two, that the tests themselves are sufficiently difficult intellectually that children

may fail them who use the morpheme in their own speech. The present experiment studies the effect of teaching upon these performances, whatever the reason for the original low scores.

Results

Table 17 shows scores on four kinds of performances before

Insert Table 17 about here.

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and after the program. Scores on the picture-meaning test represent mean percentages of items correct. The context-cue test was scored separately for the oral and written responses on a criterion that took into account ability to differentiate between endings used with singular and plural subjects as well as total number of items correct. Significant improvement was found on all tests, although final scores were still far from perfect on most. The improvement was more marked on the context-cue test, in contrast to the results in the Harlem experiment where a two-item context-cue test without pictures or writing showed no effects.

Discussion

This experiment shows that it is possible to increase understanding and use of the Standard English verb ending by use of meaningful drill exercises. By building upon existing grammatical knowledge and using concrete meaning cues throughout, even a difficulty and redundant English form can be taught to children as young as 7 or 8 years old within the context of a school situation. The distinctive characteristics of our programs as com-

pared with most school lessons are not the kinds of tasks they require or the questions they ask, but the use of systematic grammatical analysis in selecting targets for learning and concentration upon a particular form to be learned. In addition, our programs and tests avoid abstract terminology, provide all possible concrete props to convey meaningful understanding, and build systematicly upon related existing grammatical knowledge. They show that these techniques borrowed from the developing technology of foreign language teaching are potentially also useful in teaching a second dialect of one's own language.

IV. BLACK NONSTANDARD ENGLISH IN THE HIGH SCHOOL

INTRODUCTION

The general hypothesis of the high school study was that speakers of a nonstandard dialect would acquire more competence in the use of standard forms if their instruction provided a clear and simple knowledge of the grammatical differences between nonstandard and standard forms. If the instruction, on the other hand, consisted simply of rote drill in standard forms with no attempt to show the contrasting grammatical structures, then we supposed that there would be less gain in command of the standard forms. To measure competence in standard forms, we examined spontaneous speech as well as a variety of oral and written language exercises similar to ones commonly used in schools. These included written compositions, grammatical transformation exercises, filling in the grammatically standard form in a given sentence context, selecting the standard sentence to express the meaning shown in a picture and translating

nonstandard sentences into Standard English. We expected that grammatical instruction would have different effects on different linguistic performances.

We selected for study two grammatical patterns characteristic of Black English which differed clearly from Standard English and which are stigmatized in their nonstandard forms. Black English is characterized by almost exclusive use of the "double negative" or "negative concord" rule in negative sentences that include indeterminates or certain adverbs. Black English also differs from Standard English in that the third person singular present tense verb inflection is frequently omitted in the former. In each case the standard form is generally considered to have higher social status.

The design of our experiment involved three groups of subjects who used these particular Black English forms in their speech and in several of our tests. All individuals were interviewed and tested both before and after they were given one of three instructional programs on these grammatical forms. One program gave a systematic lesson in the use of the standard verb inflection using concrete examples and a minimum of technical grammatical terminology, but organized to show clearly the grammatical contrast between standard and nonstandard verb forms. A second program explained and illustrated the contrasting negative rules in a similar simple but systematic way. A control program gave nonsystematic or randomly ordered examples requiring the use of the standard verb and negative forms similar to the kinds of exercises commonly found in English workbooks

and also similar in form and number to the response items in our systematic programs. Thus we could measure for each individual the difference between grammatical performance on a particular form before and after one of three learning experiences. The subjects' gain in competence on the standard verb inflection could be measured after a systematic program on that inflection, after a nonsystematic set of exercises including items on that inflection and after exposure to an unrelated program on the use of the standard negative rule. Their gain in use of the standard negative could be compared after systematic instruction on that rule, after nonsystematic grammatical examples, and after a (for this purpose) irrelevant verb program. The nonsystematic control lesson contained items on both the negative and verb forms. It was roughly the same length as the systematic programs, but since it contained only items directly using the forms in question without the additional material that contributed the systematic grammatical explanation, it also gave the subjects as many actual chances to use the standard forms as did each of the systematic programs. Thus all groups experienced the same pattern of pretest-lesson-posttest and the control group made as many relevant responses as each experimental group on the particular form being tested.

METHOD

Subjects

Three ninth and tenth grade classes in "Developmental English" at the New London (Connecticut) High School provided the subjects. "Developmental English" is offered to students

whose language competence is considered to need development. All the students in the three classes were interviewed and pretested to select those whose usages included the two nonstandard forms we were measuring. Twenty-one were selected whose use of both standard forms was lowest on the largest number of our tests and who also showed at least some spontaneous use of the nonstandard alternates. Of the 21, 15 were English-speaking Black Americans, 3 were white and 3 were Puerto Ricans. The whites and Puerto Ricans use the double negative because it is a widespread nonstandard usage by no means confined to Blacks. Their use of the zero verb inflection may be the consequence of considerable exposure to Black English. The 21 were divided into three groups, each containing 5 Black students, 1 white and 1 Puerto Rican. The three groups were selected so as to be roughly equivalent in their initial use of both nonstandard forms. Each group received the same test treatment but a different intervening lesson in grammar.

Verb Tests

Speakers of Black English frequently omit the third singular verb inflection, thus producing sentences like the following

He play a lot. My father say he want to get away.

However, there are few or none who consistently omit the inflection or who use it with plural subjects, so it is possible that many who use it relatively seldom actually understand its grammatical meaning and are able to use it when they feel it is necessary. We therefore used a variety of tests to tap both active and passive competence at different levels of conscious

control. Oral tests were administered and recorded on tape individually except as noted. Written tests were given as part of the classroom work except as noted. Two comparable forms of each measure were used in counterbalanced order as pretest and posttest.

Spontaneous usage.-- Each student was interviewed along with one other student from the same class and the conversation was recorded on a Uher 4000-L tape recorder. The interviewer asked about school and play activities, attempting to elicit as informal a style of speech as possible. Questions about regular activities were asked in order to elicit simple present tense forms. Written use was measured by asking for written compositions on topics which seemed likely to generate present tense verbs. The compositions and tapes were searched for all instances of third person singular present tense verbs in which the inflection clearly was or was not used, and the score derived was the proportion of all such instances where the inflection occurred.

Context-cue test.-- Subjects were given sentences such as the following:

A singing bird is a bird that _____.

Roaring tigers are tigers that _____.

In the oral form the experimenter read the sentence ending without a falling intonation, so as to suggest that the subject add the proper word. The subject responded orally with the required verb. In the written form they were instructed to "Fill in one missing word in each sentence." Three singular and one plural

verb were scored on a scale of 0 to 10 according to correctness in using the inflection and differentiating between singular and plural.

Time transformation.-- Subjects were shown a short typewritten story told in the past tense and instructed to "change the story to something that still happens all the time." About eight singular verbs were scored to find the proportion of those actually changed to present tense which were given the s inflection.

Number transformation.-- In the oral form of the number transformation test, the subjects were read aloud 10 sentences like the following:

At noon the sisters go to Dunkin Donuts.

At night my brothers go to the movies.

The instructions asked them to "change these sentences so that they tell about just one sister (or brother)." In the written form a nine-line typed story was shown with instructions to "cross out every word that means there was more than one person doing it and write it over so there is only one." Responses were scored only if the student actually changed the subject to singular and used a present tense verb. The score was the proportion of these verbs which were given with the s ending.

Story corrections.-- A 13-line typewritten story, modified from an 8 year old speaker of Black English, was given to subjects with the instructions, "A boy told this story. He told it in everyday colloquial English. Cross out every word that isn't in formal business English and write in the formal way to say

the same thing." (The use of the terms "everyday colloquial" and "formal business" English were selected in consultation with the teacher, who also introduced them in class work.) Most of the present tense verbs lacked the inflection. The subject's score was the number of these verbs that were corrected to add the s, provided the ending was still appropriate after other changes had been made in the sentence.

Word choices.-- A common English lesson consists of sentences like the following:

Martha (like, likes) chocolate,

but her brothers always (want, wants) vanilla.

Our word choices test contained four such choices of which three required singular and one a plural verb. The test was scored on a scale of 0 to 10 according to correctness in choosing the inflected form and differentiating between singular and plural.

Picture-meaning test.-- Understanding was tested in the same way as in the previous experiments, using pairs of pictures and minimal pairs of phrases patterned after those of Fraser, Bellugi and Brown (1963). All the phrases used the nouns deer, sheep and fish as subjects to avoid giving a clue to number other than the verb morpheme. As before, oral "comprehension" was the ability to select the correct picture to match the experimenter's spoken utterance and "production" was the ability to produce the correct phrase to match a given picture. We also tested "reading comprehension," the ability to match printed sentences to the correct pictures, and "written production," the ability to write the correct sentence under

each picture. The score was the proportion of scorable responses that conformed to Standard English for each type of response.

Grammatical knowledge test.-- After the written production test, one pair of the same test pictures was used to test explicit grammatical knowledge. The pictures with their typed captions in the correct places were shown. The s inflection was typed in red. The experimenter asked, "Can you tell me why does the one with the red s go with this picture (pointing to singular)?" Subjects who answered, "Because there is only one sheep" were scored correct. Those who rejected the match and said the one with the s went with the plural picture were scored incorrect.

Negative Tests

Speakers of Black English rarely deviate from the negative concord rule or "double negative" in those negative sentences which contain indeterminates or certain adverbs (Labov, et al. 1968). Oral and written tests were again used to assess active and passive competence with the Standard English rules of negation for such sentences.

Spontaneous usage.-- The same interviews that assessed verb inflection use were searched for standard and nonstandard negative uses. Written compostions on topics likely to elicit double negatives were also obtained. Scores represented the proportion of standard negatives used out of the total number of sentences that could have shown negative concord, that is, that contained indeterminates or adverbs that have negative forms.

Opposite transformation.-- One method of eliciting negative sentences was to ask subjects to produce sentences that "mean the opposite" of a given sentence, such as:

I can pick some flowers there.

Anybody can read this.

In the oral form the experimenter read the stimulus sentence and recorded the oral response. In the written form the subject read a positive sentence on one side of the page and filled in blanks to form a negative sentence beside it, for example:

I can find some animals there.

I _____ find _____ animals there.

Reponses were scored only if they took the expected form with a double negative or with the Standard English equivalent. The proportion of standard negatives out of this total was the reported score.

Sentence and story corrections.-- Sentences containing double negatives were read to the subject with the instruction to "tell me how it would be in formal business English." In the written form a list of typed sentences was given with the instruction, "If you find something that is colloquial, cross it out and write it over in formal business English." Sentences like the following were included:

Mary can't hardly make nobody laugh.

I don't never want no trouble.

In addition the same typewritten story used to measure corrections of verb inflections was scored for correction of its double negatives. In all corrections tests responses were

scored only if they were, in fact, translations of the same meaning into Standard English negatives. The proportion of negative usages changed into standard form out of the total either changed correctly or left in nonstandard form was the score.

Word choices.-- The same test used to assess the verb inflection contained items that tested the negative, for example:

Tom won't (never, ever) have enough time.

Nobody (can, can't) do that.

The score was the proportion of examples in which the word selected made the sentence Standard English.

EFFECTS OF TWO KINDS OF TRAINING

A comparison of pre- and posttest scores on oral tests of the verb inflection and negative for subjects who received systematic training programs on those two usages respectively showed no differences that might support the hypothesis. This was true whether all subjects or only Black subjects were considered. Differences were also insignificant for the control groups. The written posttests were not completed by enough subjects to make any comparisons. It seems possible that our instruction had some effect on grammatical knowledge since four of the seven subjects who received it answered the grammatical knowledge test correctly afterwards as compared with only four out of seventeen comparable subjects who were not instructed about the verb ending. However, these numbers are not conclusive.

The design of the experiment on the effect of grammatical

knowledge essentially proved not to be feasible. Although the classroom setting of the procedures seemed necessary to justify them to the student "subjects" and also to enhance generalizability for educational purposes, it also created schedule problems which led to a postponement of the essential written posttesting until months after the training procedure and also to our failure even to obtain many of the key tests. The classroom setting also made it impossible to be sure in individual cases that the tests were the work of the person whose name appeared on the paper, since much copying and mutual helping was characteristic of the classroom. With a small number of subjects, we could not afford the resultant errors.

It seems likely also that the training programs themselves were too short. They were carried out individually in two sessions. Previous attempts to teach the use of the verb inflection to younger children had shown it to be a difficult task. In the first experiment involving only one short training session, second graders made no progress at all. (See Chapter II.) In the second, which provided four sessions on four different days, there was significant improvement in use and understanding of the inflection for children entering the second grade. (See Chapter III.) It is possible that despite their more advanced age, developmental English students in junior high school also need more time to absorb this rather subtle grammatical form at an intellectual level.

COMPARISONS OF LANGUAGE USE BETWEEN GROUPS

Tables 18 and 19 show the mean scores for three subgroups

Insert Tables 18 & 19 about here.

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of students on oral and on written tests of the standard verb inflection, which were given to substantially all the developmental English students. Whites scored significantly more standard on all of the oral and most of the written tests. Although numbers of Puerto Ricans are very small, their results were more similar to the Blacks' scores than to the whites' on oral tests and on most written tests. On all tests where Blacks and whites differed significantly, Puerto Rican averages were between the two, but significantly different from whites only in composition and the picture-meaning tests.

The explicit grammatical knowledge of Blacks and whites was compared on the written picture-meaning test by considering the proportion of each group that answered correctly when asked directly why the caption with the verb _s_ went with the singular version of the picture. 71% of the 21 white students and 40% of the 20 Black students answered correctly along with 2 out of the 6 Puerto Ricans. All those scored incorrect thought the verb _s_ should go with the plural picture. The difference between those proportions for Black and white is significant ($z(39) = 3.12$; $p<.01$). It is interesting to compare these proportions for Black and white tenth graders in developmental English with the results for the same kind of test given to

second and fourth graders in New London elementary schools. (See Table 14.) There 60% of the white second graders and 83% of white fourth graders answered correctly along with 77% of Black second graders. Apparently age and dialect are not the only factors in this kind of grammatical knowledge.

Group differences for the negative, shown in Tables 20 and 21 for oral and written tests respectively, are much less

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Insert Table 20 & 21 about here.

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clear. Although Blacks are significantly less standard than whites in their average scores based on all tests taken, they differed on only four of the eight particular tests. Whites were significantly more likely to change double negatives to standard forms in both oral and written presentations and more likely to choose words to form a standard rather than a double negative. Whites were more standard than Blacks in spontaneous speech and written composition, but differences were not significant. One reason for the lack of significance may be that the number of subjects who actually used scorable negatives was very small, but the observed differences in use of standard and nonstandard negatives in written composition was also very small.

It is clear that the frequency of omission of the Standard English verb inflection in spontaneous speech is related to the individual's ability to respond in Standard English to a number of other verbal tasks of the kind frequently required in school. It is also related to ability to understand the

inflection as a sign of number as measured by our picture-meaning tests. Both oral and written performances are related to spontaneous use. Our white students, who used the inflection 98% of the time in speech and 92% in writing, were compared with the Black group, who averaged 64% in speech and 48% in writing. The differences between the group averages on the other tests are the basis of our assertion at this point that these performances are interrelated. (Intercorrelations will be shown later.)

White and Black students showed less difference on the use of double negatives than on the verb. This was expected since the double negative is characteristic of nearly all non-standard dialects of English, whereas the omission of the verb inflection is more peculiarly Black. Labov et al. (1968) report almost exclusive use of negative concord by their speakers of Black vernacular, whereas our Black subjects used 42% standard negatives in speech as compared with 61% for their white classmates. The fact that our subjects were interviewed in school as part of their English lessons could be expected to increase their use of standard forms, but our subjects probably also include some whose language is quite standard since they were not, like Labov's subjects, selected for their known membership in the "vernacular culture." Blacks and whites hardly differed in their use of standard negatives in written compositions, both using the negative concord only about one-fourth of the time.

TEST COMPARISONS

In understanding the pattern of performance on our various tests, two sociolinguistic facts seem relevant. One is the social status of the verb inflection and the negative concord rule in the minds of speakers and hearers. The double negative is what Labov calls a "stereotype" (1972 f), that is, people are aware of its use and often consciously judge the status of a speaker accordingly. The verb inflection, on the other hand, is probably merely an "indicator," a grammatical form that is found differently in different cultural groups but is seldom noticed and thus not used as a criterion of status. Its meaning is only dimly recognized. (Our picture-meaning test of its meaning as a sign of singular number was difficult even for whites, who regularly use the inflection, and extremely difficult for Blacks.)

The second social fact is that our Black subjects, like most speakers of Black English, can be expected to be bi-dialectal, that is, they have some ability to shift dialects according to the social situation, using more standard forms in formal settings. However, shifting dialects should be easier when the forms of each dialect are consciously recognized, as in the case of the stereotyped double negative, than for almost unnoticed forms like the verb inflection.

In addition to the social characteristics of language, two psycholinguistic dimensions of our tests should be considered. One is the extent to which a test requires conscious attention

to grammatical differences. At one extreme we find the spontaneous and relatively informal speech of our interviews, where we would expect less self-conscious attention to the forms of language than in most of the other tests. Near the other extreme is our picture-meaning test of the verb inflection, where correct responses depend upon explicit attention to the inflection and where its precise meaning has to be understood. Our "grammatical knowledge" question, "Why does the red s go with this picture?" asks for explicit knowledge of the rule in its most conscious form. In general, it seems likely that written tests require more conscious attention to details than oral tests since the performance of writing is less natural and more dependent upon school learning than is speech. Our subjects were placed in developmental English classes largely on the basis of their difficulties with written work.

The other psychological dimension of interest is the active-passive one. Some of our tests require subjects to generate language of their own whereas others ask them to judge the correctness of language that is presented to them. It is possible that a bi-dialectal subject may generate the required standard form when asked to, but be willing to accept as correct nonstandard forms, such as are found in our sentence corrections test. Our word choices test, which provides both forms, would stand somewhere about the middle of the active-passive dimension. Tests in which blanks must be filled to

complete a sentence would be less active than those in which the whole sentence had to be generated in the response. Thus in our context-cue and opposite transformation tests, the oral form would be more active than the written form.

Putting the above background considerations together, it is possible to predict that our Black subjects will give more standard responses in the oral tests of the verb inflection than in the written tests because the oral tests are generally more active and require less conscious attention to a form of which few are normally aware. Taking just those students who had scores on both members of any oral-written pair of tests, we calculated the values of the differences between the means. These means, shown in Table 22, are not exactly the same as the

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Insert Table 22 about here.

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means shown in Tables 18 and 19 since the latter were for all subjects who took each individual test. The differences in mean scores on all oral and on all written tests for Black subjects was significant at the .01 level of confidence with higher scores for the oral versions. The differences for three of the individual tests which had comparable oral and written forms was also signficant. For the picture-meaning tests, however, where both the oral and written forms required explicit attention to the grammatical form and its meaning, there was no significant difference between the two.

For the double negative, we could expect the effect of the

written form to be different, since people are much more aware of this form and of its social value. Since writing is a more studied and more formal medium than speech, we could expect subjects to make use of their awareness of the form to decrease their use of it in writing. Only nine individuals, however, gave us at least two scorable negatives in both speech and writing, so the difference indicated in Table 6 was not shown to be significant. The difference for the oral and written opposite transformations was in the opposite direction, more standard in oral than in written form. Our subjects found this test extremely difficult, especially in its written form. Many responses were unscorable because they were not the opposite required or were not grammatical in any dialect.

The difference between active and passive performances of bi-dialectal subjects may account for certain other differences between these test scores. Considering only written tests, we can compare spontaneous composition, where subjects generated their own language, with the sentence correction test, where they first had to judge a sentence and change it only if they found it unacceptable. Considering only those Black subjects who had scores on both tests, the mean proportionate use of Standard English in spontaneous composition was .74 whereas the mean proportion of nonstandard sentences that were correctly changed to standard form was only .38 ($\underline{z}(9) = 2.66$; $\underline{p}<.05$). It seems possible that even when speakers are able to standardize their own compositions, they are still unable

to spot nonstandard usages that conform to their alternate rules of speech.

INTERCORRELATIONS BETWEEN TESTS

Tables 23 and 24 show the intercorrelations of various

Insert Tables 23 & 24 about here.

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tests for the verb inflection and standard negative respectively. Each correlation is based upon the scores of all the students in developmental English for whom we had scores on both the two tests in question. The N's vary therefore. The correlation values shown are all those that were found to be significant at the five per cent level of confidence. Those also significant at the one per cent level are in bold face (underlined). Insignificant correlations are omitted.

Verb Inflection Tests

Use of the verb inflection in spontaneous speech is correlated with all other oral measures of its use and with even the reading and writing forms of the picture-meaning tests. However, only one other written test has a significant correlation with spontaneous oral use. All of the oral tests are correlated with all other oral tests, but the same cannot be said for the written tests. Most of the nonsignificant intercorrelations of written tests involve the written composition and the word choice tests, both of which had very narrow variances, thus limiting the amount of correlation that was possible. These same tests also account for almost half of the nonsignificant

correlations between oral and written tests.

The fact that the picture-meaning tests intercorrelate closely with one another regardless of whether the performance is active or passive, oral or in writing, probably reflects the fact that the test always requires attention to the inflection and conscious understanding of its meaning with regard to number. The proportion of correct statements of the grammatical reason for using the _s_ ending is significantly and much higher for those with scores of 2 or higher on the written picture-meaning test than for those with lower reading comprehension ($z(45) = 9.68$; $p<.001$). More important is the fact that these tests are correlated with nearly all the other tests whether oral or written and account for all the correlations over .70 involving individual tests. This tends to support the general view that consistent use of a grammatical form is related to explicit grammatical knowledge. It does not, of course, tell whether grammatical awareness is easier to achieve for speakers who have a competence in using the form or whether having grammatical understanding causes the increase in competence to use it. The former seems like a plausible explanation, but the latter, which is also the basic hypothesis on which this experiment was based, is not incompatible with it. It seems likely that each kind of knowledge may enhance the other, though it is also obvious from other observations that explicit knowledge is not a necessary condition for competence in use.

Negative Tests

Among the tests of negative use (Table 24), we find that four are most intercorrelated with one another and also related to most other tests. These are the oral and written forms of the sentence correction test, the story correction test and the word choices. The only oral test in this group is almost exactly like its corresponding written form. Three tests were relatively unrelated to the other tests in this set. The written composition produced relatively few scorable responses so that the number of subjects involved in the correlation and the range was restricted. This fact could account for its lack of correlation with other tests, and it would therefore not be safe to conclude that spontaneous written use of the double negative is unrelated to other performances on the negative. The opposite transformation test was very difficult and also had a narrow range. As for the oral use of the negative, we cannot account for its lack of significant correlations on grounds of numbers or range, since the latter was quite wide. A plausible hypothesis, consistent with the view that the negative is under relatively conscious control, is that variations in its spontaneous use are affected more by those social conditions that affect style and formality of speech than they are by relative grammatical competence with standard negative rules.

USE OF DIFFERENT TYPES OF NEGATIVE SENTENCES

There are a number of different kinds of sentences in which the negative concord rule can manifest itself. We included four different types in our tests and analyzed all our spontaneous

productions for the frequency of uses of each. We found no spontaneous sentences that did not fit into one or another type. Table 25 lists the sentence types and gives examples of

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Insert Table 25 about here.

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each using both standard and negative concord rules. The first type, which is the most frequently used, involves an indeterminate coming after the verb. Standard English can handle the negative two ways, either by coupling not with the auxiliary or by incorporating the negative in the indeterminate. The negative concord rule inserts the negative in both places. Both standard forms are used, the former more often. The two standard forms are somewhat differently semantically, and our story correction test evokes the first overwhelmingly. This is also the kind of sentence in which the negative concord rule is most frequently employed.

The second type of sentence involves the adverb hardly. Hardly is treated as containing a negative element, and therefore in Standard English no other negative is introduced in the sentence. According to the negative concord rule, the auxiliary must be coupled with not after hardly. We found very few spontaneous uses of hardly, all with negative verbs. In the corrections test, most of the negative verbs with hardly were accepted as correct.

Our third type of sentence has the indeterminate as subject coming before the verb. In Standard English no other negative is used, but strict negative concord would require a not with

the auxiliary following. We found only three instances of negative concord in this type of sentence, two in speech (from Blacks) and one in writing (from a white). This is consistent with Labov's (1972 c) report that transfer of a negative to a verb from a preceding indeterminate is much less frequent in the speech of his Black subjects than transfer from verb to a following indeterminate. He found no instances in white nonstandard speech.

The fourth type of sentence involves the adverb ever. In Standard English, the negative element can be incorporated either into the auxiliary or into the adverb, making it never. Negative concord uses negatives in both places. Most of our spontaneous instances were standard, all of these using never, but it is clear from the way our subjects correct the negative concord uses in the story test that they also command the alternative form of the standard.

The four types of negative sentences differ not only in their spontaneous frequency but also in the pattern of their use in our different measures. One way to consider these differences is to arrange our measures on a scale from active to passive language use, that is, from production of sentences or parts of sentences in speech or writing to judging the standardness of sentences presented in complete form. The data from spontaneous speech represent the most active end of the scale, followed by several tests in which sentences were produced by the subjects, but under more restrictive conditions. Written composition was included here, since writing is more difficult

than speaking because it imposes problems of spelling as well as a more difficult style. Production was also asked for in the oral and written opposite transformation task. The subjects formed their own negative sentences, but were restricted to expressing the opposite of a given sentence.

At the passive end of the continuum subjects were given written sentences, separately or as part of a story, and asked to change them into "formal business English." Separate sentences were also presented orally for the same kind of correction. Most of the errors in these tests consisted of failing to change nonstandard usages, so the tests became a measure of passive acceptance of nonstandard forms as opposed to active production. Some standard sentences were included among the separate sentences, and a possible error would be to change these into nonstandard forms. These latter changes were scored separately.

Midway between active production and passive judgment was the "word choice" test in which one of the two words had to be selected to complete a sentence. One choice produced a standard negative, the other, negative concord.

Figure 2 shows the percentages of standard responses for all types of tests by Black and white subjects separately for

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Insert Figure 2 about here.

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the four types of negative sentences. The group comparisons reflect the fact already reported that whites are significantly more standard than Blacks in use of these negatives. It is also

worth noting that the patterns of performance on the different tests within each sentence type are almost the same for the two racial groups.

The location of the indeterminate before or after the verb makes a clear difference in the relative standardness of spontaneous speech and the more structured tests. The post-verb indeterminate usually conforms to the negative concord rule for the Blacks and almost half the time for whites, whereas the verb is usually standard (without not) following a negative indeterminate for both groups. For the more structured production tests and for word choices, however, the two locations of the indeterminate make little difference in the frequency of standard usage. Despite the fact that our subjects use the negative concord rule most often for post-verb indeterminates, they are equally able to use the standard rule in a more formal test and, in fact, are more likely to correct nonstandard usages in the passive correction test. The verb following a negative indeterminate is more often left in nonstandard form by Black subjects, although they use the standard form overwhelmingly in their spontaneous speech. It is clear that percentage of standard usages in spontaneous speech, even in a school setting, does not correlate exactly with ability to give standard responses on tests or to recognize nonstandardisms in other people's language.

Our data on the spontaneous use of hardly are insufficient for any conclusions, but the few instances were with negative verbs and it was the teacher's impression that negative verbs were normally used with hardly by these students. Our other

tests also indicate that their hardly sentences normally include a negative verb. On the word choice tests only the whites gave more than half standard responses for these sentences. The profile of negative concord use across different kinds of tests is similar to that for post-verb indeterminates in that spontaneous speech is apparently less standard than test performance, although the frequency of standard usage is much lower for all subjects on all measures.

The pattern for sentences with ever is more like that for pre-verb indeterminates in that spontaneous usage is more standard than word choices or passive judgments, especially for Blacks. There were no other production tests of this kind of sentence.

It is clear from these results that the use of negative concord as opposed to the standard negative rule varies with the kind of sentence and the performance required as well as with the dialect of the speaker. Our Black subjects are clearly bidialectal for most types of sentences. They can produce sentences in the standard form in a test situation, but they have considerable tolerance for nonstandard forms even in written form in that they often fail to correct them even when instructed to change the material to "formal business English." Whites are more standard than Blacks in all these respects.

As for sentences with hardly, the use of negative concord is much more usual with all subjects. It seems possible that the language itself is changing in this case, so that can't hardly is approaching the status of standard usage. Data from more

consistently standard speakers would be necessary to confirm this hypothesis.

One pedagogical implication of these findings is that the task of "teaching Standard English to speakers of nonstandard dialects" is not primarily one of explicit instruction in standard grammar. Our subjects already have considerable command of the standard rules at the level of controlled tests. Rather, if students are to be made more competent in Standard English, they may need to become more aware of the contrast between the two usages, both of which they know, and perhaps to have instruction in the appropriate situations for using them. Drills that would give better control over style-shifting would be required. The contrast between their present production of post-verb indeterminate negatives in speech and in writing, as shown in Table 25, shows that they already shift to more frequent standard usage in writing, but the number of nonstandard uses even in writing and especially their acceptance in the story corrections test, both situations where the instructions called for "formal business English," suggest that further training is necessary before they will be able to handle Standard English negatives consistently.

ATTITUDES TOWARD STANDARD AND NONSTANDARD ENGLISH

If the goal of providing students with the ability to use Standard English in appropriate situations is to be achieved, there are several kinds of knowledge that must be imparted. First, of course, competence in the standard language itself is required. It is understood that such competence normally includes

ability to speak in various styles, since most speakers have competence in more than one dialect, or register. Second, it is necessary to know which forms belong to which dialect or style. Obviously this knowledge need not be in the form of explicit rules, but at some level there must be an ability to discriminate between the dialects in order to select which forms to use. Third, it is necessary to know which situations are appropriate for which dialect. Finally, for purposes of learning to become more bi-dialectal, it is necessary to have some motivation, an attitude toward the standard dialect that disposes one to want to learn it better or to use it.

In view of the general lack of interest in the subject of grammar which is characteristic not only of substandard speakers, but of most educated speakers as well, it is difficult even to bring people's attention to the subject-matter of language (the first kind of knowledge mentioned above), let alone persuade them to put effort into learning Standard English. It may be particularly true of school children who are still several years away from adult occupations. In the course of our work with students in seventh through tenth grades, in New London, we have kept a record of all discussion of language use and have made every effort to encourage such discussion in order to get information about how students might be motivated to learn and also to find out what they needed to learn.

It was clear from our observations that these students had very little knowledge of or interest in the study of language, but that insofar as they were aware of it, they took a very

conventional academic view of language difference. Unlike linguists, they regarded one dialect of English as definitely "more equal" than the others. They used words like "proper" and "conservative," in describing standard forms and words like "mistake," "unproper," "slang," and "wrong" in describing nonstandard. Occasionally they described the standard language as "making more sense" or "sounding right," but there was often ambiguity about which dialect they were talking about when they used these terms. It was as though they thought the standard forms ought to make more sense and sound better, but often slipped into describing their everday talk this way.

They were generally able to identify some kinds of people who use each type of language. English teachers, educated people, and officials were expected to use Standard English, and there was some expectation expressed that they would actually fail to understand nonstandard forms. Users of nonstandard were "ordinary people," "regular people," "little kids," and "drop-outs." Situations where Standard English should be used were identified as talking to grown-ups or guests in the house or English teachers, and applying for jobs or official favors. Ordinary language was for use with friends, outdoors, at home, and "when you get mad."

Attitudes toward Standard English were ambivalent. For example, one student said of a story written in nonstandard English, "if we keep reading stuff like this, we're going to have garbage in our brain." However, in the same conversation someone said, "It's a cool story the way it sounds," and "A

regular person talks like that .... instead of, like, the proper."

Attitudes like these create a problem for the linguistically oriented teacher who would like to recognize the value of nonstandard forms and avoid the impression of treating the students' own language as unworthy, but perhaps more serious is the all but universal lack of any kind of awareness of or interest in the differences between standard and nonstandard forms especially at the level of competent use. Only a few stereotypes like ain't are commonly noticed. Students who were asked to compare paragraphs written in standard and nonstandard language often failed to notice double negatives or verb inflections in writing and used the nonstandard forms in their own discussion, even while asserting that such usages were wrong or didn't make sense. Those relatively few students who had some idea of style differences were a step ahead of most even though their attitudes toward them were linguistically naive.

The dilemma for the teacher is that the easiest way to make students aware of the differences in question is to enlist their existing prejudices about "proper" English, yet insofar as that is done, the differences are treated as deficiencies. Two escapes from the dilemma suggest themselves. One is to make knowledge of language as such a part of the education of every child, divorcing the teaching of grammar from the notion that its main purpose is to improve one's language or writing and conveying a more scientific attitude that language is a subject worthy of study for its own sake in all its richness and variation. The art and sociology of nonstandard dialects would

have to be part of such a curriculum. Presumably its students would have the necessary background to be taught something about dialect switching. At the moment such a curriculum sounds more like a linguist's dream than a presently feasible program for teaching. Another, perhaps more realistic approach to the problem, might be through a greater emphasis on oral language training in a context of drama and public speaking. Drama gives the opportunity for dialect practice in a "natural" context without the necessity of explicit intellectual training in the nature of language. Assuming that most people have an implicit recognition of the differences in question and some practical knowledge of when each kind should be used, they could be given exercises in standard usages and in switching styles in the context of playing roles or making speeches. Dramatic and oratorical skills have more obvious interest and potential value to the ordinary person than abstract grammar. Such an approach is consistent with the finding that explicit grammatical knowledge is only indirectly related to language competence. However, it is also an anti-intellectual view from the point of view of linguistic science. The present experiment was designed on the opposite assumption, that is, that explicit knowledge of language differences would have a positive effect. It is not possible to conclude at this time whether the problems of background knowledge and motivation which contributed to our inability to get a clear test of the hypothesis are inherent and inevitable in any language-learning situation or whether our design might be feasible in some other realistic educational setting. Either

way it seems likely that the oral role-playing approach would be a useful alternative technique if only because it would give the instruction a realistic and practical context, something which is necessary whether or not abstract knowledge is also imparted.

REFERENCES

Baratz, J. C. Teaching reading in an urban Negro school system. In F. W. Williams (Ed.), Language and Poverty. Chicago: Markham, 1970.

Berdan, R. & Pfaff, C. W. Sociolinguistic variation in the speech of young children: an experimental study. (Professional Paper No. 21). Los Alamitos, California: Southwest Regional Laboratory, 1972.

Cerf, B. Pop-up Riddles. New York: Random House, 1967.

Deutsch, M. The disadvantaged child and the learning process: Some social psychological and developmental considerations. In A. H. Passow (Ed.), Education in Depressed Areas. New York: Teachers College Press, 1963.

Fraser, C., Bellugi, U., & Brown, R. Control of grammar in imitation, comprehension and production. Journal of Verbal Learning and Verbal Behavior, 1963, 2, 121-135.

Labov, W. The Social Stratification of English in New York City. Washington, D.C.: Center for Applied Linguistics, 1966.

Labov, W. The logic of nonstandard English. In J. W. Alatis (Ed.), 20th Annual Round Table: Linguistics and the Teaching of Standard English to Speakers of Other Languages or Dialects. Washington, D.C.: Georgetown University Press, 1970.

Labov, W. Is the Black English Vernacular a separate system? In W. Labov, Language in the Inner City: Studies in the Black English Vernacular. Philadelphia: University of Pennsylvania Press, 1972. (a)

Labov, W. The Linguistic consequences of being a Lame. In W. Labov, Language in the Inner City: Studies in the Black English Vernacular. Philadelphia: University of Pennsylvania Press, 1972. (b)

Labov, W. Negative attraction and negative concord. In W. Labov, Language in the Inner City: Studies in the Black English Vernacular. Philadelphia: University of Pennsylvania Press, 1972. (c)

Labov, W. Some sources of reading problems for speakers of Black English Vernacular. In W. Labov, Language in the Inner City: Studies in the Black English Vernacular. Philadelphia: University of Pennsylvania Press, 1972. (d)

Labov, W. The social motivation of a sound change. In W. Labov, Sociolinguistic Patterns. Philadelphia: University of Pennsylvania Press, 1972. (e)

Labov, W. The social setting of linguistic change. In W. Labov, Sociolinguistic Patterns. Philadelphia: University of Pennsylvania Press, 1972. (f)

Labov, W., Cohen, P., Robins, C., & Lewis, J. A Study of the Non-standard English of Negro and Puerto Rican Speakers in New York City. Vol. 1 Phonological and Grammatical Analysis. Final Report, Cooperative Research Project No. 3288, U. S. Office of Education, 1968.

Torrey, J. W. & Silverman, L. Teaching Standard English grammatical morphemes to speakers of another dialect. Proceedings of the 79th Annual Convention of the American Psychological Association, 1971, 6, 531-532.

Trudgill, P. The Social Differentiation of English in Norwich.
London: Cambridge University Press, 1974.

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Table 1

Mean Correct or Standard Responses for All Morphemes

Language Measures	Morphemes					
	Plural	Verb		Possessive	Copula	Verb Possessive and Copula
		Singular	Present			
Spontaneous	92		40	53	72	58
Context-cue	94		48	66	77	60
Oral Reading	89		76	66	87	76
Picture-meaning	88	8	70	76	46	49
Oral Pretest[a]	(1.6)	(.1)	(1.2)	(1.3)	(.4)	(2.96)
Oral Posttest	(1.9)	(.3)	(1.6)[b]	(1.9)[c]	(1.3)[d]	(3.00)[e]
Reading Comprehension	98	22	78	89	91	70
Grammatical Explanation	81	0	12	5	12	

Note. Scores are percentages expcept as noted.

[a] Maximum possible score on picture-meaning tests is 2 for individual morphemes and 8 for combined dialect-related morphemes.

[b] Number showing improvement on posttest: $\underline{X}^2(1)=5.1$; $\underline{p}<.05$.

[c] Number showing improvement on posttest: $\underline{X}^2(1)=13.0$; $\underline{p}<.001$.

[d] Number showing improvement on posttest: $\underline{X}^2(1)=16.0$; $\underline{p}<.001$.

[e] Number showing improvement on posttest: $\underline{X}^2(1)=18.4$; $\underline{p}<.001$.

Table 2

Phrases for Testing Comprehension of Grammatical Morphemes

Morpheme	Pretest-Posttest	Program Test
Plural	The dog(s) ate.	Street light(s)
	The bird(s) ate.	Green tree(s)
	The puppy(s) opened the door.	
	The boy(s) ate.	
Verb (Singular meaning)	The sheep push(es) the car.	The cat_ eat(s).
	The rabbitsplash(es).	
	The catsleep(s).	
	The deer drink(s).	
Verb (Present meaning)	She let(s) a cat in.	
	She put(s) a picture up.	
	She put(s) a pot down.	
	He shut(s) it.	
Possessive	The prince('s) doctor	The duck('s) nurse.
	The witch('s) teacher	The farmer (rode. ('s road.
	The man('s) teacher	
	The boy('s) angel	
Copula	He (ate.) ('s eight.)	She('s) cut.
	He (won.) ('s one.)	She (knew. ('s new.
	The boy (blew.) ('s blue.)	
	The duck (read.) ('s red.)	
	He('s) cut. She('s) pushed.	

Table 3

Metropolita. Achievement Test Means

and Correlations with Various Language Measures

			Picture-Meaning			METROPOLITAN	
	Context Cue	Oral Reading	Oral Reading	Word Knowledge		Reading Average	
Spontaneous Speech	.59	.37	.49	---	---	.41	---
Context-cue		.52	.54	---	---	---	---
Oral Reading			.51	.48	.55	.63	.68
PICTURE-MEANING Oral Comprehension +Production				.48	---	.50	.41
Reading Comprehension					---	.57	.50
Class Means					2.5	2.7	2.6
Ranges					1.7-3.3	1.7-3.9	1.8-3.5

Note. The table shows coefficients only for correlations significant at at least the five percent level. Those in italics are significant at the one percent level.

Table 4

Sandra Baker's Language Scores

Language Measures	Morphemes					Verb Possessive and Copula
	Plural	Verb		Possessive	Copula	
		Singular	Present			
Spontaneous	100	43		0	33	32
Context-cue	100	36		0	38	29
Oral Reading	93	78		75	91	80
PICTURE-MEANING[a]						
Oral Pretest	1	0	2	1	0	3
Oral Posttest	2	0	2	2	1	5
Metropolitan	Word Knowledge: 2.0			Reading: 3.2		Age: 7 yr 9 mo

[a]Maximum possible score on picture-meaning tests is 2 for individual morphemes and 8 for combined dialect-related morphemes.

Table 5

Sammy Norton's Language Scores

Language Measures	Morphemes				Verb
	Plural	Verb	Possessive	Copula	Possessive and Copula
		Singular Present			
Spontaneous	100	67	25	76	67
Context-cue	100	58	67	100	70
Oral Reading	94	72	67	91	75
PICTURE-MEANING[a]					
Oral Pretest	2	0 2	2	0	4
Oral Posttest	2	0 2	2	2	6
Metropolitan	Word Knowledge: 1.9		Reading: 1.7		Age: 7 yr 10 mo

[a]Maximum possible score on picture-meaning tests is 2 for individual morphemes and 8 for combined dialect-related morphemes.

Table 6

Bettye Quale's Language Scores

Language Measures	Morphemes				Verb Possessive and Copula
	Plural	Verb	Possessive	Copula	
		Singular Present			
Spontaneous	96	29	100	100	79
Context-cue	100	75	100	88	83
Oral Reading	94	96	57	87	83
PICTURE-MEANING[a]					
Oral Pretest	2	0 0	1	0	1
Oral Posttest	2	0 1	2	2	5
Metropolitan	Word Knowledge: 3.0		Reading: 3.6		Age: 7 yr 4 mo

[a]Maximum possible score on picture-meaning tests is 2 for individual morphemes and 8 for combined dialect-related morphemes.

Table 7

Keith Yarrow's Language Scores

Language Measures	Morphemes					Verb Possessive and Copula
	Plural	Verb		Possessive	Copula	
		Singular	Present			
Spontaneous	85	20		-	38	31
Context-cue	90	33		67	67	46
Oral Reading	90	96		78	93	90
PICTURE-MEANING[a]						
Oral Pretest	2	0	2	2	0	4
Oral Posttest	2	0	2	2	2	6
Metropolitan	Word Knowledge: 3.3		Reading: 3.6		Age: 7 yr 8 mo	

[a]Maximum possible score on picture-meaning tests is 2 for individual morphemes and 8 for combined dialect-related morphemes.

Table 8

Personality Sketches

Judged "Self-Expressive: Concerned with Own Feelings"

I

Trying to use the experimental sessions as an opportunity for fun and games. In the initial session with another child gave some trenchant criticism of the dramatic quality of some children's television programs but was no match for the other in assertiveness. Teacher said was immature, boisterous, and disruptive, a fighter.

Frequently gave attention to the wrong word so that the distinctions baffled him/her. Tried to get cues from the experimenter about what was right and, failing that, showed weariness with the whole thing. Didn't really understand the purpose of the context-cue test, either.

II

Dominated over the other child when they were interviewed together. Interrupted more often, and insisted on "winning" the game even to the point of openly cheating, though it was obvious to him/her that "winning" was a necessary consequence of having had the first turn. Also asked persistently and regularly to be given things, a picture, the riddle book, and other objects used. The argument of fairness to others in the class had no weight with him/her because he/she wanted it. The experimental procedures appealed to him/her, but primarily as a means of getting something or winning.

The teacher called him/her a "fine boy/girl" and a good worker but said he/she lacked drive. Orientation toward material reward and lack of concern for the task for its own sake in the experimental situation may show up in class as disinterest because there is less obvious reward there.

III

An aggressive one. Out for a good time in the experimental sessions, and wanted to do own thing. Told of fights he/she had had and wanted to sing the other child's song again because the other "didn't sing it right." In the program sessions kept resisting the task and asking for arithmetic to do, but used every ruse to avoid returning to the classroom afterward and to get every bit of candy reward he/she could. Never intimidated or anxious about the work and frequently tried to interrupt it for own purposes.

The teacher described him/her as aggressive and concerned with sex.

Table 9

Personality Sketches

Judged "Self-Controlled: Concerned with Impression on Others"

I

Business-like and fairly confident. Teacher described as a worker. Approached the tests and program with caution, trying hard to be correct and complete, as though to protect self from exposure, but neither in great fear nor in self-display. Said no more than necessary and was a little tense.

II

Was a beautiful child and knew it. Constantly being told it, and had once won a beauty contest. Marched at the head of the class line always and was persistently eager to be chosen every time the experimenter came to get someone. Boys/girls in the class argued over who would "marry" him/her and several mentioned as their "boy/girlfriend." Diligent and confident in answers, though often made seemingly careless errors. More concerned with correct pronunciation than with meaning. Showed neither initiative nor enthusiasm, but complete willingness to perform, as though to display ability. The teacher said he/she was bright and artistic. Possibly ballet lessons and general talent for display contribute to this reputation.

III

Manner was one of quiet formality. Interviewed first with another child who set a pattern of fairly formal language and coached him/her a little when he/she was speaking. Accepted instructions as he/she also did the experimenter's. Became even quieter and more formal when he/she found the task difficult but was always apparently willing to come and do his/her best. Fearful of expressing self but appreciative of the attention and expressed thanks politely. One morning he/she met the experimenter on the way to

school, promptly left the group he/she was with to say, "Hello" and took the experimenter's hand to walk the remaining block to school, talking contentedly all the way and excusing self politely when he/she had to go in another door of the school.

Teacher described him/her as "a pleasure."

Table 10

Mean Scores for Use of Standard Forms of Dialect-Related Morphemes by Expressive and Self-Controlled Groups by Self-Expressive and Other-Oriented Groups

	Spontaneous Speech	Context-Cue	Imitation Comprehension Production
Verb, Possessive and Copula			
Self-Expressive	45 *	47 **	73 *
Other-Oriented	69	72	79
Verb			
Self-Expressive	34	40	15.5
Other-Oriented	43	54	16.7
Copula			
Self-Expressive	54 **	56 **	18.4 **
Other-Oriented	87	92	22.3

*Probability of difference between proportions: $p < .05$.

**Probability of difference between proportions: $p < .01$.

Table 11

Percentage of Questions Showing Use of Flip-flop Rule

Question	Auxiliary: Can or could	Copula	Do	Other	Copula Do or Other	All
			Harlem Group (Black)			
Yes-no	87 (39/45)*	07 (4/61)	17 (13/79)	14 (4/28)	13 (21/165)	29 (60/210)
Wh	100 (3/3)	68 (39/57)	31 (12/39)	29 (2/7)	51 (53/103)	53 (56/106)
			New London Group (White)			
Yes-no	100 (7/7)	100 (3/3)	80 (12/15)	-- (1/1)	84 (16/19)	88 (23/26)
Wh	-- (0/0)	100 (16/16)	100 (12/12)	-- (0/0)	100 (28/28)	100 (28/28)

* Fraction on which percentage is based shown below each.

Table 12

Frequency of Use of Various Types of Negative Sentences

Type and Example	New York Black		New London High School	
	First Grade	Second Grade	Black	White
Post-Verb Indeterminate				
Standard				
He can't do anything.	2	0	10	12
He can do nothing.	0	0	6	5
Negative Concord				
He can't do nothing.	73	53	90	14
Hardly				
Standard				
I can hardly write.	0	0	0	0
Negative Concord				
I can't hardly write.	1	2	3	1
Subject Indeterminate				
Standard				
Nobody can catch'em.	0	0	11	3
Negative Concord				
Nobody can't catch'em.	5	3	2	0
Never				
Standard				
I can never go there.	0	0	16	6
I can't ever go there.	0	1	0	0
Negative Concord				
I can't never go there.	1	8	8	1

Table 13

Mean Scores for Use of Standard Forms

by Black and White Groups

	Morphemes				
	Plural	Verb Singular Present	Possessive	Copula	Verb Possessive and Copula
Spontaneous					
Harlem Pretest	92	40	53	72	58
White 2nd Grade	99	99	98	99	99
Context-Cue					
Harlem Pretest	93	37	61	78	59
White 2nd Grade	93	93	97	93	94
White 4th Grade		100	100	97	99
Picture-Meaning					
Harlem Pretest	.6	.1	1.2	1.3	.4	2.96
Black New London	1.7	.3	.8	1.1	.9	3.00
White 2nd Grade	1.9	.9	1.7	1.8	1.2	5.53
White 4th Grade	2.0	1.3	1.7	1.9	1.7	

Note: All score differences between the Harlem pretest and the white Grade 2 are significant at at least the five percent level of confidence with the exceptions of the plural morpheme scores and the copula context-cue scores.

Table 14

Percentages of Correct Choices in Picture-Meaning Comprehension and Correct Statements of Grammatical Meaning

	Picture-Meaning Comprehension	Statements of Grammatical Meaning			
		Harlem		New London	
	Harlem				
		School	Neighborhood	School	School
	2nd Grade	2nd Grade	2nd Grade	2nd Grade	4th Grade
Morpheme Meanings		Black	Black	White	White
Plural	96	(81)	88	87	100
Verb Singular	57	(0)	77	60	83
Verb Present	86	(12)	82	93	100
Possessive	88	(5)	71	47	94
Copula	76	(12)	53	60	94

Table 15

Printed Forms of Minimal Pair Phrases Used in Picture-Meaning Test

Practice Item (noun)	Test Item -iz allomorph	Test Item -s allomorph	Test Item -z allomorph
Form A			
dogs	The sheep pushes.	The catssleeps.	The firemun runs.
dog	The sheep push.	The catssleep.	The firemun run.
Form B			
birds	The rabbitssplashes.	The fishermun waits.	The deer runs.
bird	The rabbitssplash.	The fishermun wait.	The deer run.
Form C			
elephants	The policemun rushes.	The deer drinks.	The dogsslides.
elephant	The policemun rush.	The deer drink.	The dogsslide.
Form D			
cats	The workmun washes.	The boyssits.	The sheep climbs.
cat	The workmun wash.	The boyssit.	The sheep climb.

Table 16

Context-Cue Test Items

Form A	Form B
Part I	
A sitting bull is a bull that _____.	working farmer
A climbing monkey is a monkey that _____.	swimming duck
Work horses are horses that _____.	talking birds
A singing giraffe is a giraffe that _____.	eating pig
Part II	
A screaming elephant is an elephant that scream__.	hopping bird
Sleeping lions are lions that sleep__.	pecking chickens
Bill, the dancing bear, is a bear that dance__.	mooing cow
Part III	
Tony, the growling tiger, is a tiger that _____.	barking dog
A swinging ape is an ape that _____.	crowing rooster
Jumping kangaroos are kangaroos that _____.	climbing goats
A kicking goat is a goat that _____.	drinking horse

Table 17

Mean Scores on Subtests Before and After Training in Percentages of Maximum Possible

	Picture-meaning		Context-cue	
	Oral Comprehension & Production	Reading Comprehension	Speaking	Writing
Pretest	12	38	56	22
Posttest	58	100	86	61
Probability of Gain [a]	< .025	< .025	< .005	< .005

[a] Probabilities of gain are assessed by a Wilcoxon signed ranks test of individual gain scores (one tail).

Table 18

Group Comparisons

Mean Scores on Oral Tests of Verb Inflection

		Speech	Context-Cue	Number Transformation	Picture-Meaning Comprehension	Picture-Meaning Production	Mean Oral Tests
Black	Mean	.64	.67	.62	.23	.25	.49
	N	21	23	23	23	23	23
White	Mean	.98	.93	.90	.57	.55	.77
	N	21	23	21	23	23	23
Puerto Rican	Mean	.63	.52	.60	.17	.13	.40
	N	6	6	6	6	6	6
Black v. White	t	5.04	3.26	3.38	3.13	3.05	4.58
	p<	.001	.01	.01	.01	.01	.001
Black v. Puerto Rican	t	.09	1.06	.18	.41	1.04	.83
	p<						
White v. Puerto Rican	t	4.35	3.42	2.77	2.19	2.64	3.72
	p<	.001	.01	.02	.05	.02	.001

Note: The subscripted numbers represent the N for each mean.

Table 19

Group Comparisons

Mean Scores on Written Tests of Verb Inflection

		Composition	Context Transformations: Cue	Context Transformations: Time	Context Transformations: Number	Story Correction	Word Choice	Picture-Meaning: Reading	Picture-Meaning: Writing	Mean Written
Black	Mean	.48	.18	.50	.09	.50	.41	.28	.33	.35
	N	15	22	19	22	22	22	24	22	24
White	Mean	.92	.67	.73	.57	.59	.54	.72	.68	.67
	N	12	23	19	19	20	23	23	22	25
Puerto Rican	Mean	.54	.32	.71	.25	.41	.57	.11	.06	.35
	N	4	6	3	6	6	6	6	6	6
Black v. White	t	3.86	4.22	2.06	4.62	.79	1.58	3.84	2.79	4.43
	p<	.001	.001	.05	.001			.001	.01	.001
Black v. Puerto Rican	t	.26	.83	.91	1.20	.46	1.38	.97	1.61	.02
	p<									

Table 19 Cont'd

			Context Transformations			Story	Word	Picture-Meaning		Mean
		Composition	Cue	Time	Number	Correction	Choice	Reading	Writing	Written
White	t	2.86	1.84	.06	1.67	1.07	.18	3.90	3.58	3.52
v.										
Puerto	$p<$	.02						.001	.01	.01
Rican										

Note. The subscripted numbers represent the N for each mean.

Table 20

Group Comparisons

Mean Scores on Oral Tests of Negative Usage

		Spontaneous Speech	Opposite Transformation	Sentence Correction	Mean Oral Negative
Black	Mean	.42	.73	.43	.54
	N	19	19	23	22
White	Mean	.61	.86	.70	.76
	N	0	20	23	20
Puerto Rican	Mean	.18	.88	.44	.48
	N	4	4	6	5
Black v. White	t	1.53	1.24	3.66	3.16
	p<			.01	.01
Black v. Puerto Rican	t	1.71	.81	.11	.50
	p<				
White v. Puerto Rican	t	2.00	.13	2.30	2.66
	p<	.05		.05	.02

Note. The subscripted numbers represent the N for each mean.

Table 21

Group Comparisons

Mean Scores on Written Tests of Negative Usage

		Composition	Opposite Transformation	Corrections Sentence	Corrections Story	Word Choice	Mean Negative
Black		.72	.59	.38	.50	.56	.53
	N	11	22	20	22	22	23
White		.77	.68	.69	.51	.80	.70
	N	8	22	22	20	23	24
Puerto Rican	Mean	.75	.69	.35	.28	.57	.46
	N	2	4	6	6	6	6
Black v. White	t	.29	1.10	4.09	.03	2.68	2.64
	p<			.001		.02	.02
Black v. Puerto Rican	t	.10	.67	.31	1.40	.04	.76
	p<						
White v. Puerto Rican	t	.07	.03	2.75	1.46	1.95	2.33
	p<			.02		.05	.05

Note: The subscripted numbers represent the N for each mean.

Table 22

Tests of Mean Differences

between Comparable Oral and Written Tests

for Black Subjects Only

	Oral	Written	t^a	N	p less than
Verb					
Spontaneous Speech & Writing	.67	.33	2.71	16	.02
Context-cue	.66	.18	7.06	22	.001
Number Transformation	.62	.11	7.01	23	.001
Picture-meaning Comprehension & Reading	.23	.26	.59	23	
Production & Writing	.27	.30	.49	21	
Mean Verb Tests	.49	.32	3.60	23	.01

Table 22 Cont'd

	Oral	Written	t	N	p less than
Negative					
Spontaneous Speech & Writing	.36	.68	1.88	9	
Opposite Transformation	.72	.59	1.88	22	
Sentence Correction	(.43)	(.38)	b		
Mean Negative Tests	(.54)	(.53)	b		

a t tests significance of difference between the two proportions

b Unpaired data, taken from Tables 4 and 5, were not tested statistically.

Table 23

Intercorrelations of Verb Inflection Tests

	OCC	ONT	PC	PP	MO	WCo	WCC	TT	WNT	SC	WCh	PR	PW	MW
ORAL														
Spontaneous Speech	.53	.55	.39	.40	.70	---	.41	---	---	---	---	.38	.34	.39
Context-cue		.56	.47	.50	.76	.39	.43	---	---	---	---	.49	.34	.37
Number Transformation			.44	.46	.74	.63	.32	.36	---	---	---	.41	---	.38
Picture Comprehension				.85	.84	---	.41	---	.49	.30	---	.72	.64	.64
Picture Production					.65	---	.42	.39	.46	.37	---	.78	.71	.71
Mean Oral						.45	.49	.38	.39	---	---	.73	.60	.66
WRITTEN														
Composition							.41	.48	---	---	---	.39	---	.51
Context-cue								---	.70	.41	---	.49	.33	.70
Time Transformation									---	---	---	.56	.50	.59
Number Transformation										.54	.33	.63	.55	.82
Story Correction											.31	.47	.37	.68
Word Choice												---	---	.42
Picture Reading													.87	.87
Picture Writing														.81
Mean Written														

Table 23 Cont'd

Note. Correlation values are shown only where they were significant at the five percent level. Those underlined were also significant at the one percent level.

Table 24

Intercorrelations of Negative Tests

	OOT	OSC	MO	WCo	WOT	WSC	StC	WCh	MW
ORAL									
Spontaneous Speech	---	.35	.72	---	---	---	---	---	---
Opposite Transformation		.56	.82	---	---	---	---	---	---
Sentence Correction			.83	---	---	.63	.44	.43	.59
Mean Oral				---	.34	.56	.36	.40	.50
WRITTEN									
Composition					---	---	---	---	.43
Opposite Transformation						.43	.38	.38	.67
Sentence Correction							.65	.62	.80
Story Correction								.63	.84
Word Choice									.79
Mean Written									

Note. Correlation values are shown only where they were signif ant at the five percent level. Those underlined were also significant at the one percent level.

Table 25

Types of Negative Sentences with Examples

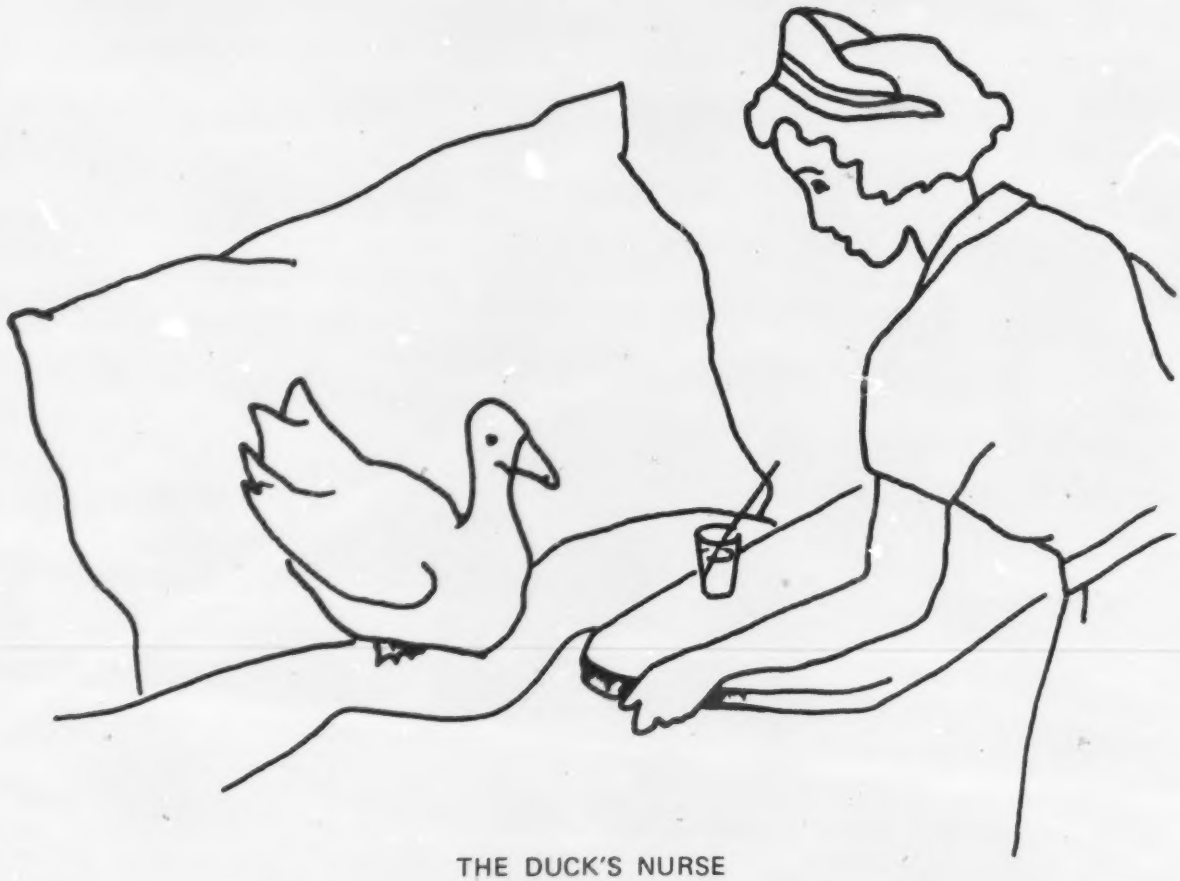
and Frequencies of Pretest Usage

	Spontaneous Speech	Written Composition	Story Correction
Post-Verb Indeterminate			
Standard			
He can't do anything	20	15	82
He can do nothing.	11	11	1
Negative Concord			
He can't do nothing.	104	5	60
Hardly			
Standard			
I can hardly write.	0	0	9
Negative Concord			
I can't hardly write.	4	1	32
Subject Indeterminate			
Standard			
Nobody can catch'em.	14	9	4
Negative Concord			
Nobody can't catch'em.	2	1	12
Never			
Standard			
I can never go there.	22	0	32
I can't ever go there.	0	0	21
Negative Concord			
I can't never go there.	9	0	25

Legends

Figure 1.-- Picture-meaning test sample item.

Figure 2.-- Percentages of standard usage in four types of negative sentences. Percentages based on fewer than five utterances are shown in parenthesis.



THE DUCK'S NURSE

THE DUCK NURSE

	Black	White
Post-Verb Inderterminate Spontaneous Speech	15	52
Other Produced Sentences	84	97
Word Choice	69	88
Non-standard Corrected	55	68
Hardly Spontaneous Speech	(0)	(0)
Other Produced Sentences	18	35
Word Choice	40	61
Non-standard Corrected	20	35
Subject Indeterminate Spontaneous Speech	85	(100)
Other Produced Sentences	85	90
Word Choice	60	83
Non-standard Corrected	34	62
Never Spontaneous Speech	67	86
Other Produced Sentences	--	--
Word Choice	30	83
Non-standard Corrected	52	78